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ABSTRACT

This report compares findings from faculty surveys conducted as part of the 1987-88 National Survey of Postsecondary Faculty, which is limited to faculty and staff with instructional responsibilities, and the 1992-93 National Study of Postsecondary Faculty, which includes instructional as well as noninstructional faculty. In particular, the report examines faculty composition (employment and tenure status, academic rank, highest degree, and social/demographic characteristics); work requirements (workweek, time allocation, instructional workload, research productivity, workload satisfaction); and salaries (overall compensation, by source of income, and satisfaction with salary and benefits). Some of the changes from 1987 to 1992 highlighted by the report include: an increase in the percentage of part-time instructional faculty; no change in the percentage of faculty who held the rank of full professor; a decline in the percentage of tenured faculty; some "aging" of both faculty and staff; an increase of 6 percent in female faculty; little change in the percentage of white, full time faculty; less satisfaction with workloads; a fairly constant level of research productivity; little change in the overall duration of the work week; and salaries keeping pace with inflation. The four appendices include supplementary tables, technical notes, standard error tables and survey questionnaires. (LEE)

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NATIONAL CENTER FOR EDUCATION STATISTICS

Statistical Analysis Report September 1997

1993 National Study of Postsecondary Faculty
(NSOPF-93)

Instructional Faculty and Staff in Higher Education Institutions: Fall 1987 and Fall 1992

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FOREWORD

This report is part of a series of publications released from the 1993 National Study of Postsecondary Faculty (NSOPF-93) and the 1988 National Survey of Postsecondary Faculty (NSOPF-88). These studies, conducted by the National Center for Education Statistics (NCES) within the Office of Educational Research and Improvement of the U.S. Department of Education, attempt to fill the information gap about faculty and instructional staff in U.S. colleges and universities. The National Endowment for the Humanities and the National Science Foundation provided additional support for these studies.

A number of earlier reports have presented information about faculty and instructional staff in the fall of 1987 and the fall of 1992. This is the first report that compares this important population across this five-year period. We hope the information in this report will be of interest to the research community and will stimulate discussions on faculty issues. Based on the number of individuals who have contacted the National Center for Education Statistics since the release of the first NSOPF-93 publication, we know there is a keen interest in data on faculty and instructional staff in our nation's colleges and universities. We hope that NSOPF-93 and future cycles of NSOPF will provide useful information to these individuals.

NCES plans to release several additional reports from the NSOPF-93 faculty survey. We encourage individuals to keep track of our publications through the internet at http://www.ed.gov/NCES and through our announcements to the higher education community.

Finally, researchers are strongly encouraged to conduct their own in-depth analysis of the NSOPF data.

Paul D. Planchon Associate Commissioner Surveys and Cooperative Systems Group	Daniel Kasprzyk Director Education Surveys Program

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Also, we wish to thank the members of the NSOPF-93 National Technical Review Panel, whose knowledge of and various perspectives on the issues contributed importantly to both the richness of the study and its relevance to the higher education community. Finally, our gratitude is extended to the thousands of individuals who participated in the study, including institutional coordinators, administrators, and faculty members. Clearly, the study could not have been completed without their cooperation.

HIGHLIGHTS

This report compares findings from the faculty surveys conducted as part of the 1987-88 National Survey of Postsecondary Faculty (NSOPF-88) and the 1992-93 National Study of Postsecondary Faculty (NSOPF-93). Both surveys gathered extensive information from samples of faculty in institutions of higher education in the United States.[1] While the NSOPF-88 faculty survey was limited to faculty and staff who had instructional responsibilities,[2] the NSOPF-93 faculty survey included these individuals as well as faculty who had no instructional responsibilities during the fall. Thus, the comparisons presented in this report include only a subset of faculty from the 1993 study.

An economic recession in the early 1990s coupled with budget deficits in many states resulted in major cutbacks to higher education. Many states reduced appropriations to higher education during this period, forcing public colleges and universities to reexamine their allocation of resources and to consider alternatives for increasing revenues from sources other than the states. Although private institutions typically do not rely on state appropriations, the recession of the early 1990s resulted in operating deficits on many campuses. This report examines a number of areas related to faculty that could have been affected by budget reductions – faculty composition, work requirements, and salaries. Since instructional costs comprise the largest single expenditure of higher education institutions, and faculty salaries absorb the largest share of these instructional costs, changes in faculty policies could result in substantial savings or costs to institutions.

The remainder of this section highlights key findings from each section of the report; it does not provide an exhaustive overview of all findings.

Composition of instructional faculty and staff: Fall, 1987 and Fall, 1992

Academic characteristics

- In the fall of 1992, 58 percent of all instructional faculty and staff were employed full time and 42 percent were employed part time. This represents a substantial increase from the fall of 1987 in the percentage of instructional faculty and staff who were employed part time and a corresponding decrease in the percentage who were employed full time (table 2.1).

- There was no change in the percentage of instructional faculty and staff who held the rank of full professor between the fall of 1987 and the fall of 1992. However, there was an increase in the percentage of instructional faculty and staff who were instructors or lecturers between the fall of 1987 and the fall of 1992. In both years, the vast majority of full-time instructional faculty and staff employed at 4-year institutions of higher education held one of three professorial ranks (i.e., full, associate, or assistant) in both the fall of 1987 and 1992; however, the majority of full-time instructional faculty and staff employed at public 2-year institutions held the ranks of instructor or lecturer in both time periods (table 2.3).

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[1] All accredited, nonproprietary U.S. postsecondary institutions that grant a 2-year (A.A.) or higher degree and whose accreditation at the higher education level is recognized by the U.S. Department of Education.

[2] The reader is cautioned not to put too much emphasis on the exact percentage increase in part-time instructional faculty and staff between the fall of 1987 and the fall of 1992, because the way the NSOPF-93 data were collected and weighted was different from NSOPF-88. See the Technical Notes for details.

- There was a decline in the percentage of instructional faculty and staff who had tenure between the fall of 1987 and 1992 (from 58 percent to 54 percent) and an increase in the percentage of faculty who were not on a tenure track at their institution during this same time period (from 8 percent to 11 percent, respectively) (table 2.5).

- In both the fall of 1987 and the fall of 1992, approximately two-thirds of all full-time instructional faculty and staff at institutions of higher education had a doctoral or a first professional degree (table 2.7).

Social/demographic characteristics

- There was a slight "aging" of full-time instructional faculty and staff from the fall of 1987 to the fall of 1992; the average age of faculty increased from 47 years to 48 years during this time period (table 2.9).

- Females comprised 33 percent of all full-time instructional faculty and staff at institutions of higher education in the fall of 1992, an increase of 6 percentage points from the fall of 1987 (table 2.11).

- Full-time instructional faculty and staff were predominantly white, non-Hispanic in both the fall of 1987 (89 percent) and the fall of 1992 (86 percent), although there was an increase in the percentage of full-time instructional faculty and staff who were black, non-Hispanic (from 3 percent in the fall of 1987 to 5 percent in the fall of 1992) (table 2.13).

Work of full-time instructional faculty and staff: Fall, 1987 and Fall, 1992

- Full-time instructional faculty and staff were less satisfied with their workload in the fall of 1992 than they were in the fall of 1987 (table 3.9). In addition, about one-half of the full-time instructional faculty and staff in the fall of 1992 stated that the pressure to increase workload had risen in recent years (table 3.11).

- There was no change between the fall of 1987 and the fall of 1992 in the overall duration of the work week of full-time instructional faculty and staff (the average work week was 52.7 hours in the fall of 1987 and 52.5 hours in the fall of 1992 (table 3.1).

- There was an increase in two measures of classroom workload between the fall of 1987 and the fall of 1992; student contact hours increased from 300 in the fall of 1987 to 337 in the fall of 1992, and the mean number of classroom hours increased from 9.8 hours in the fall of 1987 to 11.0 hours in the fall of 1992 (table 3.5).

- In both the fall of 1987 and the fall of 1992, full-time instructional faculty and staff allocated the majority of their time to teaching activities, the second largest percentage of their time to research, and the remainder to administrative or "other activities" (table 3.3).

- There was, however, considerable variation in the allocation of their time to various work activities across different types of academic institutions. At private research universities, full-time instructional faculty and staff reported allocating approximately 35 percent of their time to teaching activities and 35 percent of their time to research activities in the fall of 1992; at public 2-year colleges, full-time instructional faculty and staff spent an average of 69 percent of their time in teaching activities and 5 percent of their time in research activities during this time period (table 3.3).

- Research productivity, as measured by the number of publications and presentations produced in the last two years, remained fairly constant for full-time instructional faculty and staff between the fall of 1987 and the fall of 1992 (table 3.7).

Monetary compensation of full-time instructional faculty and staff: Fall, 1987 and Fall, 1992

- The total earned income of full-time instructional faculty and staff kept pace with inflation between the fall of 1987 and the fall of 1992; in both years, faculty earned about $60,000 in 1992 dollars from all income sources (table 4.1).[3]

- Overall satisfaction with salaries decreased somewhat between the fall of 1987 and the fall of 1992 (table 4.5) and overall satisfaction with benefits remained about the same (table 4.7). The decrease in reported satisfaction with salaries corresponds with the lack of a true increase in faculty earnings mentioned previously.

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[3] Total earned income includes basic salary from the institution, other income from the institution, outside consulting income, and other outside income.

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SECTION 1

INTRODUCTION

In 1988 and in 1993, the U.S. Department of Education's National Center for Education Statistics, with support from the National Endowment for the Humanities and the National Science Foundation, sponsored national studies of postsecondary faculty. The five years between these two studies represent a critical period in American higher education. In the early 1990s, an economic recession coupled with budget deficits in many states resulted in major cutbacks in state appropriations to higher education. Between 1990-91 and 1991-92, 23 states experienced reductions, in current dollars, in their higher education appropriations from their state legislatures.[1] During this time, there was an overall decline of one percent in state appropriations to higher education; 10 states experienced declines of five percent or more.[2] Decreases in the purchasing power of the dollar make the impact of these cutbacks even more dramatic.

With such declines in state appropriations, public institutions were forced to examine how they allocated their reduced resources and to consider mechanisms for increasing revenues from sources other than the state. Although private institutions typically do not rely on state appropriations, the recession of the early 1990s resulted in operating deficits on many campuses. Many private institutions found themselves with revenues that fell short of projected levels.[3]

Where might colleges and universities look to reduce budget deficits and revenue shortfalls? Instructional costs comprise the largest single expenditure of higher education institutions, and faculty salaries absorb the largest share of these instructional costs. Thus, major savings to higher education institutions could be achieved by making changes in policies regarding faculty—their composition, work requirements, and salaries. This report examines these possibilities by presenting key faculty trends with data from the two faculty surveys conducted by the National Center for Education Statistics.

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[1] Only two states, Massachusetts and New Jersey, experienced declines in state appropriations to higher education between the 1988-89 and 1990-91 academic years.

[2] *The Almanac of Higher Education* (Chicago, IL: University of Chicago Press), 1992.

[3] David W. Breneman, *Liberal Arts Colleges: Thriving, Surviving, or Endangered?* (Washington, DC: The Brookings Institution), 1994.

The Data

The 1988 and 1993 faculty studies covered many of the same issues but differed from one another in several respects. The 1987-88 National Survey of Postsecondary Faculty (NSOPF-88) collected data from a sample of 11,000 faculty, 480 institutions, and over 3,000 department chairpersons. Surveys were administered in 1988 with respondents reporting on faculty policies and activities in the fall of 1987. The second study, the 1992-93 National Study of Postsecondary Faculty (NSOPF-93), did not collect data from department chairpersons but collected data from substantially increased samples of institutions and faculty: 974 public and private nonproprietary higher education institutions and 31,354 faculty and instructional staff. NSOPF-93 institutional and faculty respondents completed surveys in 1993 which referenced their policies and activities during the fall of 1992. (See Appendix B, *Technical Notes*, for a more detailed discussion of the sample design and methodology.)

In addition to the increased numbers of institutions and faculty surveyed, NSOPF-93 differed from NSOPF-88 in another important way. The earlier survey was limited to faculty and staff who had some instructional responsibilities[4] during the fall. NSOPF-93 included these individuals as well as faculty who had no instructional responsibilities (e.g., those engaged exclusively in research, administration, or public service) during the fall of 1992. Faculty status was determined by each institution. Thus, individuals with given responsibilities may have faculty status at one institution while individuals with similar responsibilities at another college or university may not.

The expanded definition of faculty used in NSOPF-93 provides a unique opportunity to examine non-instructional faculty and their role in higher education. These individuals serve as researchers, administrators, and advisers to students among other capacities.

To compare data from the 1988 and 1993 faculty studies, however, only a subgroup of faculty and instructional staff from NSOPF-93 are included: those individuals who had some instructional responsibilities for credit during the fall of 1992. This means that faculty without instructional responsibilities in the fall of 1992 are eliminated. Thus, the term "faculty" in this report refers to instructional faculty and staff only.

The Report

This report examines three specific faculty issues that potentially could be affected by changes in the higher education climate between the fall of 1987 and the fall of 1992:

- The academic and social composition of instructional faculty and staff;

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[4] Instructional responsibilities is defined as teaching one or more classes for credit or advising or supervising students' academic activities.

- The work of full-time instructional faculty and staff; and

- The compensation of full-time instructional faculty and staff.

Several reports have indicated that colleges and universities intent on cutting costs have relied more heavily on part-time and temporary faculty (often not in tenure-track positions) who typically are paid less than full-time and permanent faculty and are less likely to receive benefits.[5] Postsecondary institutions have also increased the teaching loads of their faculty in an effort to reduce the total number of positions needed to cover existing courses and programs. Perhaps most directly, some postsecondary education institutions have limited salary increases to faculty as a cost-cutting measure.[6] These possibilities and many others related to these issues are explored in the remainder of the report.

Throughout the report, comparisons are made across institutional types and academic disciplines. A modified Carnegie classification is used to distinguish among the various types of institutions of higher education across the country.[7] The following institutional categories are used throughout this report:

- Public research: Publicly controlled institutions that offer a full range of baccalaureate programs, are committed to graduate education through the doctorate, and give high priority to research. They award 50 or more doctoral degrees each year.

- Private research: Same as public research but privately controlled.

- Public doctoral: Publicly controlled institutions that offer a full range of baccalaureate programs and are committed to graduate education through the doctorate. They award annually at least 10 doctoral degrees (in three or more disciplines), or 20 or more doctoral degrees in one or more discipline.

- Private doctoral: Same as public doctoral but privately controlled.

- Public comprehensive: Publicly controlled institutions that offer a full range of baccalaureate programs and many offer graduate degrees through the master's.

- Private comprehensive: Same as public comprehensive but privately controlled.

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[5] R. Kirshstein, A. O'Malley, and C. Rodriguez. *Institutional Responses to Higher Education Cost Pressures in the 1990s* (Washington, DC: Pelavin Research Institute), 1996.

[6] E. El-Khawas, *Campus Trends 1995*. (Washington, DC: American Council on Education), July 1995.

[7] See the *Technical Notes* for a discussion of the institutional classification and *A Classification of Institutions of Higher Education*. (Princeton, N. J.: The Carnegie Foundation for the Advancement of Teaching), 1987.

- Private liberal arts: Privately controlled colleges that primarily focus on undergraduate education. More than half of their degrees are awarded in liberal arts fields.

- Public 2-year: Publicly controlled institutions that offer certificate or degree programs through the Associate of Arts level.

- Other: Public liberal arts, private 2-year, and religious and other specialized institutions, except medical.

Academic disciplines are grouped into 10 program areas, based on the reported discipline in which faculty teach.[8] The program areas used throughout this report are:

- Agriculture and home economics
- Business
- Education
- Engineering
- Fine arts
- Health sciences[9]
- Humanities
- Natural sciences
- Social sciences
- Other

Program area data in this report are limited to instructional faculty and staff employed in 4-year institutions.

Section 2, *The Composition of Instructional Faculty and Staff: Fall, 1987 and Fall, 1992,* compares the academic characteristics of instructional faculty and staff across institutions and disciplines in these two time periods as well as the social and demographic backgrounds of this group of faculty. Section 3, *The Work of Full-time Instructional Faculty and Staff: Fall, 1987 and Fall, 1992,* compares the work load, research productivity and job satisfaction of full-time instructional faculty and staff across institutions and academic disciplines. In Section 4, *The Compensation of Full-time Instructional Faculty and Staff: Fall, 1987 and Fall, 1992,* the salaries and other compensation of full-time instructional faculty and staff are compared for these two time periods.

Appendix A, *Supplementary Tables*, presents data for part-time faculty not presented in the main body of the report. Appendix B, *Technical Notes*, provides a detailed discussion of the sampling and survey methodology. Appendix C presents standard errors of the estimates. Appendix D contains a copy of the survey instruments.

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[8] See *Technical Notes* for a listing of the academic disciplines included in each of these program areas.

[9] Estimates for the health sciences are not shown separately in this report but are included in the totals. See Technical Notes for details.

All differences cited in this report are significant at the .05 level.[10]

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[10] In accordance with NCES standards, the Bonferroni adjustment to the significance level was used when multiple comparisons were made. With this adjustment, the .05 significance level was divided by the total number of comparisons made. Consequently, the t-value required for statistical significance in comparisons across institution types and program areas was approximately 2.8—a considerably more rigorous requirement than the 1.96 t-value required for a single comparison. See the *Technical Notes* for a description of accuracy of estimates.

SECTION 2

THE COMPOSITION OF INSTRUCTIONAL FACULTY AND STAFF: FALL, 1987 AND FALL, 1992

Introduction

In the fall of 1992,[11] American colleges and universities employed an estimated 904,935 instructional faculty and staff. Between the fall of 1987 and the fall of 1992, the overall number of instructional faculty and staff increased by approximately 135,000. These aggregate estimates, however, mask the diversity of instructional faculty and staff as well as specific changes in their composition over time.

Since faculty are both an institution's major resource and major expense, shifts in the composition of faculty over time can affect a college or university's budget. An assistant professor who has recently completed graduate work will be paid less than a tenured associate professor in the same field at the same institution. Faculty hired in tenure track positions have the potential to be in long-term relationships with institutions as opposed to faculty hired on a fixed-term or contract basis. Similarly, part-time faculty are typically less expensive to hire because their salaries tend to be lower, they tend not to be on a tenure track, and because institutions tend not to provide as many benefits to this group as they do to full-time faculty.[12] The academic climate between the fall of 1987 and the fall of 1992 suggests that there could be changes in the composition of instructional faculty and staff over this time period.

This section of the report describes instructional faculty and staff in these two time periods in terms of their employment status, rank, tenure status, highest degree, age, sex, race/ethnicity, and citizenship status, and highlights the changes that have occurred.

The Academic Characteristics of Instructional Faculty and Staff

Although there is considerable variation in the over 3,000 institutions of higher education in the United States and the faculty they employ, a common vocabulary can be used to describe the overall organization of the academic profession. A number of characteristics are examined that describe the academic profession and its many variations. These characteristics are:

- Employment status – whether a faculty member is employed full time or part time by the institution;

- Academic rank – whether a faculty member is considered a full, associate, or assistant professor; instructor; lecturer; or other title;

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[11] Although the survey was administered in 1993, faculty responded about their employment and activities in the fall of 1992.

[12] *Institutional Policies and Practices Regarding Faculty in Higher Education* (Washington, DC: U.S. Government Printing Office), 1997, tables 5.4 and 5.8.

- Tenure status – whether a faculty member has tenure, is on a tenure-track, or if a tenure system even exists for the faculty member; and

- Highest degree – whether a faculty member holds a doctoral or first professional degree.

Employment Status

In the fall of 1992, 58 percent of all instructional faculty and staff were employed full time and 42 percent were employed part time. There was variation in the employment status of instructional faculty and staff employed across the various types of institutions identified in this report. Instructional faculty and staff employed at 2-year institutions were much more likely to be employed part time than those employed at 4-year institutions (i.e., research, doctoral, comprehensive, and liberal arts) (table 2.1).

The NSOPF-93 data for the employment status of instructional faculty and staff reflect a substantial increase from the NSOPF-88 data in the percentage of instructional faculty and staff who were employed part time, and conversely, a decrease in the percentage of instructional faculty and staff who were employed full time (table 2.1). Although the increase in the proportion of part-time faculty supports other findings that point to this practice as a way for colleges and universities to reduce costs,[13] the reader is cautioned not to put too much emphasis on the exact change in percentage of part-time instructional faculty and staff between the fall of 1987 and the fall of 1992. NSOPF-93 data were collected and weighted differently than NSOPF-88 data, a factor that could produce differences in results.[14]

The remainder of this report examines trends in work and salary issues for full-time instructional faculty and staff. Because of the complexities involved in comparing full- and part-time faculty on work and salary issues, data on part-time faculty will be addressed in a separate report. Estimates are provided in Appendix A for part-time instructional faculty and staff in the fall of 1987 and the fall of 1992 for those individuals who are interested in trends among part-time instructional faculty and staff. The authors of this report recognize that by focusing only on full-time instructional faculty and staff, this report underemphasizes the degree to which institutions may have been affected by changes in the economic climate between 1987 and 1992.

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[13] *The Almanac of Higher Education, 1994* (Chicago, IL: University of Chicago Press), 1994, p. 49.

[14] As part of the 1993 NSOPF, institution staff were recontacted when inconsistencies arose between the estimates of instructional faculty and staff collected as part of the lists institutions provided for sampling purposes and the estimates of instructional faculty and staff collected as part of an Institution Questionnaire that asked the same institutions to provide estimates of their instructional faculty and staff. As a result of this recontacting of institutions with discrepancies in estimates, the estimate of the number of full- and part-time faculty in the fall of 1992 increased (see the technical notes for a description of the recontacting of institutions with discrepancies and the adjusted estimates). No similar reconciliation of the estimates was performed for the 1988 NSOPF.

Academic Rank

The vast majority of all full-time instructional faculty and staff employed at 4-year institutions of higher education held one of three professorial ranks (i.e., full, associate, or assistant) in both time periods (table 2.3). However, this was not true for full-time instructional faculty and staff employed at public 2-year institutions. Over one-half of all full-time institutional faculty and staff held non-professional ranks in both the fall of 1987 and the fall of 1992.

There was very little change in the distribution of full-time higher education instructional faculty and staff by academic rank between the fall of 1987 and the fall of 1992. Among all higher education institutions, about the same percentage of full-time instructional faculty and staff held the ranks of full professor, associate professor, and assistant professor in the fall of 1987 and the fall of 1992. There was a slight increase in the percentage of full-time instructional faculty and staff who were instructors or lecturers between the fall of 1987 and the fall of 1992 (table 2.3). It is not clear from the data, therefore, that institutions replaced full-time instructional faculty and staff at higher ranks with lower ranked full-time instructional faculty and staff.

In 4-year institutions, there was also very little change in the distribution of full-time higher education instructional faculty and staff by academic rank when program area is considered. Among each of the program areas in 4-year institutions, the percentages of full-time instructional faculty and staff in the various academic ranks remained about the same between the two time periods (table 2.4). The one exception was an increase in the percentage of full-time humanities instructional faculty and staff as instructors or lecturers between the fall of 1987 and the fall of 1992 (8.5 and 13.4 percent, respectively) (table 2.4).

Tenure Status

Most institutions of higher education have faculty tenure systems. In both the fall of 1987 and the fall of 1992, about one-tenth of all full-time instructional faculty and staff were at institutions that did not have a tenure system (9 percent in the fall of 1987 and 8 percent in the fall of 1992) (table 2.5).

Across all institutions of higher education, over one-half (54 percent) of all full-time instructional faculty and staff had tenure in the fall of 1992. In the fall of 1987, a slightly larger percentage (58 percent) of full-time instructional faculty and staff had tenure (table 2.5).

Although a larger percentage of all full-time instructional faculty and staff had tenure in 1987 than 1992, no change in the percentage of those who had tenure was discernible at any of the institutional types identified in this report. Similarly although a larger percentage of all full-time instructional faculty and staff were not on a tenure track in 1992 than in 1987, most types of institutions showed no significant change in the percentage of full-time instructional faculty and staff who were not on a tenure track at their institution. The one exception occurred at private doctoral institutions where only 2 percent of the full-time instructional faculty and staff in 1987 were not on a tenure track at their institution, as compared to 14 percent in 1992 (table 2.5).

The reader is alerted to a phenomenon that is apparent in this comparison of tenure differences by institutional type and control between the fall of 1987 and the fall of 1992 and that recurs in many of the analyses throughout this report. Although the overall change may be statistically significant across these two time periods, many of the changes across specific types of institutions are not. This sometimes occurs even when the magnitude of the change across institutional categories appears similar to the overall change. Because the subgroup estimates are based on smaller sample sizes and have larger standard errors, these apparent changes are not necessarily statistically significant.[15] See Appendix C for the standard error associated with each estimate in this report.

Among 4-year institutions, only the humanities program area experienced a change in the percentage of its full-time instructional faculty and staff who had tenure between the fall of 1987 and the fall of 1992; the percentage of full-time humanities instructional faculty and staff who had tenure declined from 69 percent in the fall of 1987 to 60 percent in the fall of 1992. Similarly, only full-time instructional faculty and staff in the humanities experienced an increase from 1987 to 1992 in the percentage of faculty who were not on a tenure track (7 percent versus 12 percent, respectively) (table 2.6).

Highest Degree

In the fall of 1992, approximately 65 percent of all full-time instructional faculty and staff at institutions of higher education had a doctoral or a first professional degree.[16] In the fall of 1987, a similar percentage of full-time instructional faculty and staff held these degrees (67 percent) (table 2.7).

In both the fall of 1987 and the fall of 1992, approximately 80 to 90 percent of full-time instructional faculty and staff at public research, private research, public doctoral, and private doctoral institutions had doctoral or first professional degrees. In contrast, about one-fifth of the full-time instructional faculty and staff at public 2-year colleges held such degrees in both years (table 2.7).

In 4-year institutions, the proportions of full-time instructional faculty and staff holding doctoral or first professional degrees in each program area was similar in the fall of 1987 and the fall of 1992 (table 2.8).

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[15] Because estimates for the humanities are based on relatively large sample sizes and generally have smaller standard errors due to oversampling, their apparent changes are more likely to be statistically significant.

[16] A first-professional degree is a "degree that signifies both completion of the academic requirements for beginning practice in a given profession and a level of professional skill beyond that normally required for a bachelor's degree. This degree usually is based on a program requiring at least 2 academic years of work prior to entrance and a total of at least 6 academic years of work to complete the degree program, including both prior required college work and the professional program itself. By the National Center for Education Statistics definition, first-professional degrees are awarded in the fields of dentistry (D.D.S or D.M.D.), medicine (M.D.), optometry (O.D.), osteopathic medicine (D.O.), pharmacy (D.Phar.), pediatric medicine (D.P.M.), veterinary medicine (D.V.M.), chiropractic (DC or D.C.M.), law (J.D.), and theological professions (M.Div. or M.H.L.)." (U.S. Department of Education, *The Condition of Education,*, 1994, p. 417).

Social/Demographic Characteristics of Instructional Faculty and Staff

The diversity of faculty is reflected not only in their academic backgrounds and status within their institutions but also in a number of personal characteristics that can influence their teaching, research, and general academic outlook. These social and demographic characteristics include age, sex, race/ethnicity, and citizenship.

Age

The average age of full-time instructional faculty and staff at higher education institutions was 48 years in the fall of 1992. This represents a slight "aging" of full-time instructional faculty and staff from the fall of 1987 when the average age was 47 years (table 2.9).

The average age did not increase during this time period among full-time faculty in any of the various types of institutions presented in this report (table 2.9).

In 4-year institutions, full-time instructional faculty and staff in the program areas of business, fine arts, and the natural sciences experienced an increase in average age between the fall of 1987 and the fall of 1992 (table 2.10).

Sex

In the fall of 1992, females comprised 33 percent of all full-time instructional faculty and staff at institutions of higher education, an increase of approximately 6 percentage points from the fall of 1987 (table 2.11). Variations across type and control of institution in the percentage of full-time instructional faculty and staff who were female ranged from 23 percent to 45 percent in the fall of 1992 (table 2.11).

Within the various types of institutions included in this report, increases in the percentage of full-time instructional faculty and staff who were female were found at private research institutions (20 percent in 1987 and 31 percent in 1992) and at public 2-year institutions (38 percent in 1987 and 45 percent in 1992) between the fall of 1987 and the fall of 1992 (table 2.11).

With the exception of the humanities, where the percentage of female full-time instructional faculty and staff increased from 26 percent in the fall of 1987 to 38 percent in the fall of 1992, the percentages of females in all program areas remained about the same during this time period (table 2.12).

Race/Ethnicity

Across all institutions of higher education, the vast majority (87 percent) of full-time instructional faculty and staff were white, non-Hispanic in the fall of 1992. This represented a slight (2 percentage points) decline from the fall of 1987. In contrast, the percentage of full-time instructional faculty and staff who were black, non-Hispanic increased slightly, from 3 percent in the fall of 1987 to 5 percent in the fall of 1992. However, the percentage of Asian/Pacific

Islander, Hispanic, and American Indian/Alaskan Native faculty did not change between 1987 and 1992 (table 2.13).

There were generally no changes by type of institution over this 5-year period in the percentages of full-time instructional faculty and staff by race/ethnicity. The one exception was an increase in the percentage of Asian/Pacific Islander full-time instructional faculty and staff in private research institutions during this time period (4 and 9 percent, respectively) (table 2.13).

There were no changes by program area over this 5-year period in the percentages of full-time instructional faculty and staff by race/ethnicity. However, there was some variation in race/ethnicity by program area within a given year. Both in the fall of 1987 and the fall of 1992 there was a substantially higher than average proportion of full-time Asian/Pacific Islander instructional faculty and staff in 4-year institutions in the engineering program area (19 percent compared to 6 percent overall in the fall of 1992 and 14 percent compared to 5 percent overall in the fall of 1987). In both years, this group was underrepresented in the education, fine arts, and the humanities program areas in 4-year institutions relative to their overall representation among instructional faculty and staff in 4-year institutions. Asian/Pacific Island full-time instructional staff represented a higher proportion of instructional faculty in the natural sciences (9 percent) than their overall proportion of full-time instructional faculty and staff in the fall of 1992 (6 percent).[17] Black, non-Hispanic, full-time instructional staff were overrepresented in the field of education in the fall of 1992, but not in the fall of 1987. Hispanic instructional staff were overrepresented in the field of humanities in the fall of 1987, but not in the fall of 1992; and finally, white, non-Hispanic, instructional staff were underrepresented in the field of engineering in the fall of 1992, but not in the fall of 1987 (table 2.14).

Citizenship

The vast majority of full-time instructional faculty and staff at institutions of higher education were U.S. citizens in both the fall of 1987 and the fall of 1992. There were no changes by type and control of institution or program area in the percentage of full-time instructional faculty and staff who were citizens between the fall of 1987 and the fall of 1992 (tables 2.15 and 2.16).

With only one exception, there was no variation in citizenship status by institution type in either 1987 or 1992. The only exception was the lower than average percentage of full-time instructional faculty and staff in private research institutions who were U.S. citizens in the fall of 1992 (81 percent versus 94 percent overall) (table 2.15).

Among program areas in 4-year institutions, there was a lower than average percentage of full-time instructional faculty and staff in engineering programs who were U.S. citizens in both the fall of 1987 and the fall of 1992 (86 percent versus 94 percent overall in the fall of 1987, and 84 percent versus 92 percent overall in the fall of 1992) (table 2.16).

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[17] In the fall of 1987, the proportion of Asian/Pacific Island full-time instructional staff in 4-year institutions in the natural sciences (7 percent) was not statistically different from their overall proportion of full-time instructional staff (5 percent).

Conclusion

Have instructional faculty and staff employed by American colleges and universities changed between the fall of 1987 and the fall of 1992? The answer to this question is "both yes and no."

One of the most striking changes between the fall of 1987 and the fall of 1992 has been the significant increase in the percentage of part-time instructional faculty and staff employed by higher education institutions in the United States. By the fall of 1992, 42 percent of all instructional faculty and staff in the country were employed part time at their institutions. Increases in part-time faculty may be one way that colleges and universities attempted to deal with diminished resources and increased expenses since part-time faculty tend to be a less expensive option for colleges and universities.

Changes in the distribution of faculty by academic rank or by tenure status are other ways in which colleges and universities may potentially cut costs. A change in the academic rank distribution of full-time higher education instructional faculty and staff did not occur between the fall of 1987 and the fall of 1992. In both of these years, there were more full professors (over 30 percent) than faculty at any other rank and the percentage of faculty who were full professors did not decline over this time period. It does not appear, then, that institutions have replaced more expensive full-time faculty at higher ranks with lower ranked, less expensive full-time faculty. Or, upon further inspection, have they? Despite the overall increase in the number of instructional faculty and staff in the country between 1987 and 1992 and a slight aging of the population, there was no increase in the percentage of full-time instructional faculty and staff who attained the rank of full professor over this time period. The data also show that there was a decline in the percentage of instructional faculty and staff who had tenure between 1987 and 1992 (from 58 percent to 54 percent, respectively) and a corresponding increase in the percentage of faculty who were not on a tenure track at their institution during this same time period (from 8 percent to 11 percent, respectively).

In addition to these changes in the academic characteristics of instructional faculty and staff, there were also moderate changes in the social/demographic characteristics of this group of faculty between the fall of 1987 and the fall of 1992. For instance, there was an increase in the percentage of full-time instructional faculty and staff who were females during this time period (from 27 percent in the fall of 1987 to 33 percent in the fall of 1992). There was also an increase in the percentage of full-time instructional faculty and staff who were black, non-Hispanic (from 3 percent in the fall of 1987 to 5 percent in the fall of 1992). Full-time instructional faculty and staff were predominately white, non-Hispanic (89 percent) and male (75 percent) in the fall of 1987. Despite the gains made by blacks, non-Hispanics and females, this was still the case in the fall of 1992 (86 percent and 70 percent, respectively).

Table 2.1—Number and percentage of higher education instructional faculty and staff, by employment status and type and control of institution: Fall 1987 and Fall 1992

Type and control of institution and year	Instructional faculty and staff	Employment status	
		Full-time	Part-time
1992			
All institutions[1]	904,935	58.4	41.6
Public research	132,717	80.9	19.1
Private research	49,423	65.1	34.9
Public doctoral[2]	73,570	71.8	28.2
Private doctoral[2]	46,699	61.4	38.6
Public comprehensive	141,533	66.8	33.3
Private comprehensive	75,085	51.4	48.6
Private liberal arts	58,961	64.5	35.5
Public 2-year	276,292	39.8	60.2
Other[3]	50,654	51.7	48.3
1987			
All institutions[1]	769,825	66.9	33.1
Public research	119,334	85.6	14.4
Private research	53,120	78.3	21.7
Public doctoral[2]	67,678	83.2	16.8
Private doctoral[2]	39,793	63.0	37.0
Public comprehensive	130,341	74.5	25.5
Private comprehensive	60,457	60.9	39.1
Private liberal arts	55,391	69.4	30.6
Public 2-year	200,663	47.9	52.1
Other[3]	43,047	50.0	50.0

[1] All accredited, nonproprietary U.S. postsecondary institutions that grant a 2-year (A.A.) or higher degree and whose accreditation at the higher education level is recognized by the U.S. Department of Education.

[2] Includes institutions classified by the Carnegie Foundation as specialized medical schools.

[3] Public liberal arts, private 2-year, and religious and other specialized institutions, except medical.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey" and 1988 National Survey of Postsecondary Faculty, "Faculty Survey."

Table 2.2—Number and percentage of higher education instructional faculty and staff in 4-year institutions, by employment status and program area: Fall 1987 and Fall 1992

Program area and year	Instructional faculty and staff	Employment status	
		Full-time	Part-time
1992			
All program areas in 4-year institutions*	604,828	67.1	32.9
Agriculture/home economics	11,016	88.0	12.0
Business	45,865	63.0	37.0
Education	50,860	59.2	40.8
Engineering	26,775	76.1	23.9
Fine arts	47,581	56.5	43.5
Humanities	83,299	64.9	35.1
Natural sciences	101,995	78.1	21.9
Social sciences	68,534	70.1	29.9
All other fields	75,241	58.9	41.1
1987			
All program areas in 4-year institutions*	562,843	73.7	26.3
Agriculture/home economics	12,022	84.0	16.0
Business	42,304	67.7	32.3
Education	40,765	78.0	22.0
Engineering	26,189	79.9	20.1
Fine arts	48,516	56.9	43.1
Humanities	81,872	74.2	25.8
Natural sciences	95,911	78.0	22.0
Social sciences	57,925	81.7	18.3
All other fields	46,041	63.1	36.9

* Health sciences faculty are included in the program area total but are not shown separately. See Technical Notes for details.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey" and 1988 National Survey of Postsecondary Faculty, "Faculty Survey."

Table 2.3—Number and percentage of full-time higher education instructional faculty and staff, by academic rank and type and control of institution: Fall 1987 and Fall 1992

Type and control of institution and year	Full-time instructional faculty and staff	Academic rank: Full professor	Associate professor	Assistant professor	Instructor or lecturer	Other ranks/ not applicable
1992						
All institutions[1]	528,260	30.4	23.4	23.5	16.2	6.4
Public research	107,358	39.8	26.4	22.7	7.8	3.4
Private research	32,164	33.3	22.7	27.0	11.2	5.8
Public doctoral[2]	52,808	31.3	26.3	31.2	9.3	2.0
Private doctoral[2]	28,684	30.5	26.8	29.1	10.9	2.7
Public comprehensive	94,477	34.3	26.9	26.1	11.2	1.5
Private comprehensive	38,561	26.8	29.0	31.9	9.2	3.2
Private liberal arts	38,052	28.7	25.3	29.9	10.8	5.4
Public 2-year	109,957	19.1	12.9	11.3	40.1	16.7
Other[3]	26,200	27.8	23.4	21.8	13.2	13.8
1987						
All institutions[1]	515,138	32.7	23.5	23.0	13.4	7.5
Public research	102,115	44.3	27.8	21.8	5.9	0.2
Private research	41,574	37.9	25.2	29.0	5.7	2.2
Public doctoral[2]	56,294	34.2	30.4	26.9	7.8	0.7
Private doctoral[2]	25,065	33.2	27.7	30.2	9.0	0.0
Public comprehensive	97,131	36.8	26.1	23.3	12.6	1.2
Private comprehensive	36,842	31.1	28.9	32.8	6.8	0.4
Private liberal arts	38,446	30.4	22.2	31.2	10.6	5.7
Public 2-year	96,144	15.6	9.4	11.2	33.8	29.9
Other[3]	21,528	27.2	20.2	18.3	12.4	22.0

[1] All accredited, nonproprietary U.S. postsecondary institutions that grant a 2-year (A.A.) or higher degree and whose accreditation at the higher education level is recognized by the U.S. Department of Education.

[2] Includes institutions classified by the Carnegie Foundation as specialized medical schools.

[3] Public liberal arts, private 2-year, and religious and other specialized institutions, except medical.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey" and 1988 National Survey of Postsecondary Faculty, "Faculty Survey."

Table 2.4—Number and percentage of full-time higher education instructional faculty and staff in 4-year institutions, by academic rank and program area: Fall 1987 and Fall 1992

Program area and year	Full-time instructional faculty and staff	Academic rank				
		Full professor	Associate professor	Assistant professor	Instructor or lecturer	Other ranks/ not applicable
1992						
All program areas in 4-year institutions*	405,783	33.9	26.5	27.0	9.8	2.8
Agriculture/home economics	9,698	44.6	24.6	21.9	6.6	2.3
Business	28,895	26.5	30.2	31.2	10.0	2.1
Education	30,127	26.3	32.5	26.2	11.3	3.7
Engineering	20,381	39.5	30.4	25.2	4.4	0.6
Fine arts	26,874	33.3	27.7	23.6	9.9	5.6
Humanities	54,093	36.1	25.8	21.7	13.4	2.9
Natural sciences	79,663	41.6	25.0	23.2	7.1	3.1
Social sciences	48,030	40.2	26.0	26.3	6.1	1.3
All other fields	44,346	32.1	24.0	28.3	12.1	3.5
1987						
All program areas in 4-year institutions*	414,832	36.8	26.9	25.7	8.6	2.0
Agriculture/home economics	10,104	45.9	26.6	19.4	7.8	0.2
Business	28,630	24.9	24.9	33.0	14.1	3.2
Education	31,812	32.3	25.5	26.8	12.5	3.0
Engineering	20,915	45.0	28.2	23.0	3.8	0.0
Fine arts	27,628	28.6	29.0	28.7	7.7	6.1
Humanities	60,781	42.5	26.7	20.6	8.5	1.8
Natural sciences	74,852	43.2	27.6	21.2	6.9	1.1
Social sciences	47,324	41.7	28.6	25.0	2.9	1.9
All other fields	29,042	32.0	25.2	29.2	12.5	1.2

* Health sciences faculty are included in the program area total but are not shown separately. See Technical Notes for details.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey" and 1988 National Survey of Postsecondary Faculty, "Faculty Survey."

Table 2.5—Number and percentage of full-time higher education instructional faculty and staff, by tenure status and type and control of institution: Fall 1987 and Fall 1992

Type and control of institution and year	Full-time instructional faculty and staff	Tenure status: Tenured	On tenure track	Not on tenure track	No tenure system for faculty status	No tenure system at institution
1992						
All institutions[1]	528,260	54.2	21.5	11.2	4.7	8.4
Public research	107,358	63.4	19.7	12.1	4.5	0.3
Private research	32,164	49.8	22.8	17.6	9.0	0.9
Public doctoral[2]	52,808	53.6	26.7	15.7	3.8	0.2
Private doctoral[2]	28,684	45.6	27.1	13.9	7.6	5.8
Public comprehensive	94,477	60.7	24.5	11.1	3.3	0.4
Private comprehensive	38,561	52.9	26.1	12.3	3.7	5.1
Private liberal arts	38,052	46.0	25.4	12.6	5.1	10.9
Public 2-year	109,957	52.7	15.2	6.0	4.3	21.8
Other[3]	26,200	28.6	14.2	7.3	7.0	42.9
1987						
All institutions[1]	515,138	58.4	21.0	7.9	3.6	9.1
Public research	102,115	66.9	19.2	8.5	4.6	0.7
Private research	41,574	52.4	29.7	13.1	3.2	1.7
Public doctoral[2]	56,294	58.1	27.1	11.6	3.0	0.2
Private doctoral[2]	25,065	43.7	28.1	2.1	6.6	19.6
Public comprehensive	97,131	65.2	22.1	8.7	2.9	1.1
Private comprehensive	36,842	54.9	29.4	8.7	3.8	3.2
Private liberal arts	38,446	49.4	24.5	8.2	5.3	12.7
Public 2-year	96,144	59.6	9.1	4.0	2.3	25.0
Other[3]	21,528	34.6	16.1	4.3	3.4	41.7

[1] All accredited, nonproprietary U.S. postsecondary institutions that grant a 2-year (A.A.) or higher degree and whose accreditation at the higher education level is recognized by the U.S. Department of Education.

[2] Includes institutions classified by the Carnegie Foundation as specialized medical schools.

[3] Public liberal arts, private 2-year, and religious and other specialized institutions, except medical.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey" and 1988 National Survey of Postsecondary Faculty, "Faculty Survey."

Table 2.6—Number and percentage of full-time higher education instructional faculty and staff in 4-year institutions, by tenure status and program area: Fall 1987 and Fall 1992

Program area and year	Full-time instructional faculty and staff	Tenure status				
		Tenured	On tenure track	Not on tenure track	No tenure system for faculty status	No tenure system at institution
1992						
All program areas in 4-year institutions*	405,783	55.5	23.5	12.4	4.5	4.1
Agriculture/home economics	9,698	72.4	19.3	4.1	3.5	0.7
Business	28,895	51.5	29.9	10.4	3.6	4.5
Education	30,127	54.9	23.6	14.1	4.7	2.7
Engineering	20,381	61.8	27.5	6.0	1.4	3.3
Fine arts	26,874	52.9	22.1	9.7	3.4	11.9
Humanities	54,093	59.9	18.7	11.6	5.5	4.3
Natural sciences	79,663	63.7	21.4	9.0	3.1	2.8
Social sciences	48,030	63.4	23.0	8.5	2.5	2.7
All other fields	44,346	49.1	25.7	13.6	6.8	4.8
1987						
All program areas in 4-year institutions*	414,832	58.5	23.9	8.9	3.9	4.7
Agriculture/home economics	10,104	75.3	16.8	4.9	2.6	0.4
Business	28,630	42.9	36.7	11.5	3.6	5.3
Education	31,812	60.5	18.9	12.5	3.6	4.5
Engineering	20,915	61.8	29.9	4.5	2.4	1.2
Fine arts	27,628	56.5	23.0	8.1	4.7	7.7
Humanities	60,781	68.7	15.8	6.7	4.7	4.1
Natural sciences	74,852	63.3	23.2	7.2	3.2	3.2
Social sciences	47,324	67.9	21.9	5.2	1.9	3.1
All other fields	29,042	53.5	31.2	9.0	3.4	3.0

* Health sciences faculty are included in the program area but are not shown separately. See Technical Notes for details.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey" and 1988 National Survey of Postsecondary Faculty, "Faculty Survey."

Table 2.7—Number and percentage of full-time higher education instructional faculty and staff with a doctoral or first professional degree, by type and control of institution: Fall 1987 and Fall 1992

Type and control of institution and year	Full-time instructional faculty and staff	Have doctoral or first professional degree	
		Yes	No
1992			
All institutions[1]	528,260	64.8	35.3
Public research	107,358	87.2	12.8
Private research	32,164	88.5	11.5
Public doctoral[2]	52,808	82.2	17.8
Private doctoral[2]	28,684	87.4	12.6
Public comprehensive	94,477	72.1	27.9
Private comprehensive	38,561	68.3	31.8
Private liberal arts	38,052	61.4	38.6
Public 2-year	109,957	18.7	81.3
Other[3]	26,200	50.1	50.0
1987			
All institutions[1]	515,138	67.4	32.6
Public research	102,115	89.4	10.6
Private research	41,574	91.6	8.5
Public doctoral[2]	56,294	82.0	18.0
Private doctoral[2]	25,065	89.6	10.4
Public comprehensive	97,131	68.8	31.2
Private comprehensive	36,842	72.5	27.5
Private liberal arts	38,446	62.8	37.2
Public 2-year	96,144	19.5	80.5
Other[3]	21,528	56.8	43.2

[1] All accredited, nonproprietary U.S. postsecondary institutions that grant a 2-year (A.A.) or higher degree and whose accreditation at the higher education level is recognized by the U.S Department of Education.

[2] Includes institutions classified by the Carnegie Foundation as specialized medical schools.

[3] Public liberal arts, private 2-year, and religious and other specialized institutions, except medical.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey" and 1988 National Survey of Postsecondary Faculty, "Faculty Survey."

Table 2.8—Number and percentage of full-time higher education instructional faculty and staff in 4-year institutions with a doctoral or first professional degree, by program area: Fall 1987 and Fall 1992

Program area and year	Full-time instructional faculty and staff	Have doctoral or first professional degree	
		Yes	No
1992			
All program areas in 4-year institutions*	405,783	77.9	22.1
Agriculture/home economics	9,698	82.6	17.4
Business	28,895	72.2	27.8
Education	30,127	77.0	23.0
Engineering	20,381	86.6	13.4
Fine arts	26,874	40.7	59.4
Humanities	54,093	80.1	19.9
Natural sciences	79,663	88.1	11.9
Social sciences	48,030	89.5	10.5
All other fields	44,346	68.1	31.9
1987			
All program areas in 4-year institutions*	414,832	78.9	21.1
Agriculture/home economics	10,104	85.3	14.7
Business	28,630	67.1	32.9
Education	31,812	70.4	29.6
Engineering	20,915	79.8	20.2
Fine arts	27,628	46.6	53.5
Humanities	60,781	81.5	18.6
Natural sciences	74,852	86.9	13.1
Social sciences	47,324	91.4	8.6
All other fields	29,042	69.6	30.4

* Health sciences faculty are included in the program area total but are not shown separately. See Technical Notes for details.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey" and 1988 National Survey of Postsecondary Faculty, "Faculty Survey."

Table 2.9—Average age and age distribution of full-time instructional faculty and staff, by type and control of institution: Fall 1987 and Fall 1992

Type and control of institution and year	Full-time instructional faculty and staff	Average age	Age distribution					
			Under 35	35-44	45-54	55-64	65-70	71 or older
1992								
All institutions[1]	528,260	48.0	8.2	29.7	36.5	21.2	3.7	0.8
Public research	107,358	47.8	8.2	32.4	32.9	21.7	4.1	0.7
Private research	32,164	46.4	9.6	40.3	26.7	17.5	4.8	1.1
Public doctoral[2]	52,808	47.4	9.6	31.8	34.2	19.9	3.6	0.9
Private doctoral[2]	28,684	47.3	9.8	33.3	32.4	18.0	5.0	1.5
Public comprehensive	94,477	48.6	7.5	25.6	40.3	22.7	3.6	0.4
Private comprehensive	38,561	48.6	8.5	26.8	35.6	24.1	4.4	0.7
Private liberal arts	38,052	47.5	9.1	31.4	34.4	20.4	4.0	0.9
Public 2-year	109,957	48.2	7.0	26.6	42.7	20.6	2.5	0.7
Other[3]	26,200	48.9	7.0	27.3	36.0	23.9	4.2	1.6
1987								
All institutions[1]	515,138	47.0	10.2	31.6	34.1	20.4	3.5	0.2
Public research	102,115	47.2	8.8	32.1	33.4	22.6	3.0	0.1
Private research	41,574	45.4	13.9	38.1	27.4	17.2	3.3	0.0
Public doctoral[2]	56,294	46.8	12.6	29.2	33.2	21.2	3.8	0.0
Private doctoral[2]	25,065	46.5	17.4	29.2	28.4	13.7	10.7	0.6
Public comprehensive	97,131	47.6	10.0	28.2	36.0	22.9	2.8	0.2
Private comprehensive	36,842	47.0	8.7	34.4	34.8	16.9	3.8	1.4
Private liberal arts	38,446	46.8	11.3	33.2	29.3	21.9	3.9	0.4
Public 2-year	96,144	47.4	7.8	30.5	39.5	19.6	2.7	0.0
Other[3]	21,528	46.8	8.4	37.8	32.4	17.4	3.3	0.7

[1] All accredited, nonproprietary U.S. postsecondary institutions that grant a 2-year (A.A.) or higher degree and whose accreditation at the higher education level is recognized by the U.S. Department of Education.

[2] Includes institutions classified by the Carnegie Foundation as specialized medical schools.

[3] Public liberal arts, private 2-year, and religious and other specialized institutions, except medical.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey" and 1988 National Survey of Postsecondary Faculty, "Faculty Survey."

Table 2.10—Average age and age distribution of full-time instructional faculty and staff in 4-year institutions, by program area: Fall 1987 and Fall 1992

Program area and year	Full-time instructional faculty and staff	Average age	Age distribution					
			Under 35	35-44	45-54	55-64	65-70	71 or older
1992								
All program areas in 4-year institutions*	405,783	47.9	8.4	30.6	34.8	21.4	4.0	0.8
Agriculture/home economics	9,698	49.8	8.0	23.3	34.6	27.8	4.4	1.9
Business	28,895	47.5	8.5	32.1	34.9	18.5	5.4	0.6
Education	30,127	49.9	4.0	24.3	40.8	25.8	4.8	0.3
Engineering	20,381	47.5	12.9	31.9	25.4	24.3	4.8	0.6
Fine arts	26,874	47.9	7.8	31.2	35.2	21.8	3.7	0.4
Humanities	54,093	49.3	7.1	23.3	39.4	25.1	4.2	0.9
Natural sciences	79,663	47.9	8.1	31.8	33.6	21.3	4.3	0.9
Social sciences	48,030	47.9	8.3	30.7	35.8	20.9	3.7	0.8
All other fields	44,346	47.6	9.8	30.3	34.5	20.2	4.0	1.2
1987								
All program areas in 4-year institutions*	414,832	46.9	10.8	31.8	32.9	20.6	3.7	0.3
Agriculture/home economics	10,104	46.7	11.8	27.9	39.4	18.1	2.8	0.0
Business	28,630	45.3	13.4	37.5	28.7	18.6	1.9	0.0
Education	31,812	48.2	10.4	26.2	32.6	28.0	2.7	0.2
Engineering	20,915	48.1	12.1	25.1	30.6	29.3	2.5	0.4
Fine arts	27,628	45.7	13.0	32.8	36.2	14.4	3.1	0.5
Humanities	60,781	49.2	6.1	25.6	36.7	26.8	4.5	0.4
Natural sciences	74,852	46.5	9.2	34.4	35.9	17.7	2.6	0.3
Social sciences	47,324	47.2	8.8	34.7	32.4	19.5	4.2	0.4
All other fields	29,042	46.4	12.6	34.6	28.0	18.4	6.1	0.3

* Health sciences faculty are included in the program area total but are not shown separately. See Technical Notes for details.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey" and 1988 National Survey of Postsecondary Faculty, "Faculty Survey."

Table 2.11—Number and percentage of full-time higher education instructional faculty and staff, by sex and type and control of institution: Fall 1987 and Fall 1992

Type and control of institution and year	Full-time instructional faculty and staff	Sex	
		Male	Female
1992			
All institutions[1]	528,260	66.8	33.2
Public research	107,358	76.7	23.3
Private research	32,164	69.1	30.9
Public doctoral[2]	52,808	69.9	30.1
Private doctoral[2]	28,684	76.4	23.6
Public comprehensive	94,477	66.1	33.9
Private comprehensive	38,561	64.9	35.2
Private liberal arts	38,052	61.1	38.9
Public 2-year	109,957	54.7	45.3
Other[3]	26,200	70.5	29.5
1987			
All institutions[1]	515,138	72.7	27.3
Public research	102,115	79.1	20.9
Private research	41,574	79.5	20.5
Public doctoral[2]	56,294	76.5	23.5
Private doctoral[2]	25,065	76.0	24.0
Public comprehensive	97,131	71.0	29.0
Private comprehensive	36,842	72.8	27.2
Private liberal arts	38,446	71.1	28.9
Public 2-year	96,144	62.0	38.0
Other[3]	21,528	74.3	25.7

[1] All accredited, nonproprietary U.S. postsecondary institutions that grant a 2-year (A.A.) or higher degree and whose accreditation at the higher education level is recognized by the U.S. Department of Education.

[2] Includes institutions classified by the Carnegie Foundation as specialized medical schools.

[3] Public liberal arts, private 2-year, and religious and other specialized institutions, except medical.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey" and 1988 National Survey of Postsecondary Faculty, "Faculty Survey."

Table 2.12—Number and percentage of full-time higher education instructional faculty and staff in 4-year institutions, by sex and program area: Fall 1987 and Fall 1992

Program area and year	Full-time instructional faculty and staff	Sex	
		Male	Female
1992			
All program areas in 4-year institutions*	405,783	70.4	29.6
Agriculture/home economics	9,698	77.3	22.7
Business	28,895	76.4	23.6
Education	30,127	52.7	47.3
Engineering	20,381	94.2	5.8
Fine arts	26,874	67.3	32.7
Humanities	54,093	62.2	37.8
Natural sciences	79,663	83.3	16.7
Social sciences	48,030	73.9	26.1
All other fields	44,346	68.4	31.7
1987			
All program areas in 4-year institutions*	414,832	75.3	24.7
Agriculture/home economics	10,104	68.6	31.5
Business	28,630	77.3	22.7
Education	31,812	59.0	41.0
Engineering	20,915	96.9	3.1
Fine arts	27,628	70.9	29.2
Humanities	60,781	74.1	25.9
Natural sciences	74,852	84.0	16.0
Social sciences	47,324	80.2	19.8
All other fields	29,042	77.0	23.1

* Health sciences faculty are included in the program area total but are not shown separately. See Technical Notes for details.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey" and 1988 National Survey of Postsecondary Faculty, "Faculty Survey."

Table 2.13—Number and percentage of full-time higher education instructional faculty and staff, by race/ethnicity and type and control of institution: Fall 1987 and Fall 1992

Type and control of institution and year	Full-time instructional faculty and staff	Race/ethnicity				
		American Indian/ Alaskan Native	Asian/ Pacific Islander	Black, non-Hispanic	Hispanic	White, non-Hispanic
1992						
All institutions[1]	528,260	0.5	5.3	5.2	2.6	86.5
Public research	107,358	0.1	6.9	2.8	2.2	88.0
Private research	32,164	0.2	9.0	5.0	2.1	83.7
Public doctoral[2]	52,808	0.8	6.1	3.1	2.5	87.5
Private doctoral[2]	28,684	0.2	7.1	4.9	3.7	84.1
Public comprehensive	94,477	0.5	5.1	9.1	2.6	82.7
Private comprehensive	38,561	0.2	3.3	3.5	1.6	91.3
Private liberal arts	38,052	0.5	2.8	5.4	1.3	90.0
Public 2-year	109,957	1.0	3.3	6.2	4.1	85.5
Other[3]	26,200	0.5	5.2	3.7	1.4	89.2
1987						
All institutions[1]	515,138	0.9	4.5	3.2	2.1	89.3
Public research	102,115	0.8	5.3	1.6	2.2	90.2
Private research	41,574	0.0	4.0	5.8	5.0	85.2
Public doctoral[2]	56,294	1.0	5.2	1.8	0.7	91.3
Private doctoral[2]	25,065	0.6	12.8	2.0	1.3	83.3
Public comprehensive	97,131	0.8	5.7	3.5	1.8	88.2
Private comprehensive	36,842	1.1	4.2	1.6	1.4	91.6
Private liberal arts	38,446	1.0	2.7	8.2	1.2	86.9
Public 2-year	96,144	1.2	2.0	3.4	3.0	90.4
Other[3]	21,528	0.4	0.8	2.6	1.8	94.4

[1] All accredited, nonproprietary U.S. postsecondary institutions that grant a 2-year (A.A.) or higher degree and whose accreditation at the higher education level is recognized by the U.S. Department of Education.

[2] Includes institutions classified by the Carnegie Foundation as specialized medical schools.

[3] Public liberal arts, private 2-year, and religious and other specialized institutions, except medical.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey" and 1988 National Survey of Postsecondary Faculty, "Faculty Survey."

Table 2.14—Number and percentage of full-time higher education instructional faculty and staff in 4-year institutions, by race/ethnicity and program area: Fall 1987 and Fall 1992

		Race/ethnicity				
Program area and year	Full-time instructional faculty and staff	American Indian/ Alaskan Native	Asian/ Pacific Islander	Black, non-Hispanic	Hispanic	White, non-Hispanic
1992						
All program areas in 4-year institutions*	405,783	0.4	5.7	4.9	2.3	86.8
Agriculture/home economics	9,698	0.8	2.7	4.1	1.6	90.8
Business	28,895	0.6	5.9	3.7	1.4	88.5
Education	30,127	0.5	1.2	9.2	2.1	87.1
Engineering	20,381	0.2	19.0	3.0	2.5	75.3
Fine arts	26,874	0.5	2.6	6.1	2.7	88.2
Humanities	54,093	0.3	3.4	4.2	3.9	88.3
Natural sciences	79,663	0.3	9.0	3.6	1.7	85.3
Social sciences	48,030	0.4	3.2	5.5	2.2	88.6
All other fields	44,346	0.3	3.4	6.3	1.7	88.4
1987						
All program areas in 4-year institutions*	414,832	0.8	5.2	3.2	1.9	89.0
Agriculture/home economics	10,104	1.7	1.9	1.7	2.3	92.4
Business	28,630	1.5	8.7	3.7	0.9	85.2
Education	31,812	1.1	1.2	7.0	2.4	88.3
Engineering	20,915	0.0	14.2	0.5	1.7	83.6
Fine arts	27,628	0.6	1.0	4.2	1.4	92.8
Humanities	60,781	0.8	1.8	2.8	4.0	90.7
Natural sciences	74,852	0.6	7.2	1.8	1.6	88.8
Social sciences	47,324	0.5	3.8	4.1	2.0	89.6
All other fields	29,042	1.3	1.8	4.9	1.2	90.8

* Health sciences faculty are included in the program area total but are not shown separately. See Technical Notes for details.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey" and 1988 National Survey of Postsecondary Faculty, "Faculty Survey."

Table 2.15—Number and percentage of full-time higher education instructional faculty and staff, by U.S. citizenship status and type and control of institution: Fall 1987 and Fall 1992

Type and control of institution and year	Full-time instructional faculty and staff	Citizenship status	
		Citizen	Non-citizen
1992			
All institutions[1]	528,260	93.6	6.4
Public research	107,358	90.6	9.4
Private research	32,164	81.0	19.0
Public doctoral[2]	52,808	93.1	7.0
Private doctoral[2]	28,684	92.4	7.6
Public comprehensive	94,477	94.8	5.2
Private comprehensive	38,561	96.1	3.9
Private liberal arts	38,052	96.0	4.0
Public 2-year	109,957	98.3	1.7
Other[3]	26,200	93.6	6.4
1987			
All institutions[1]	515,138	95.2	4.8
Public research	102,115	94.3	5.7
Private research	41,574	90.7	9.3
Public doctoral[2]	56,294	94.1	5.9
Private doctoral[2]	25,065	92.8	7.2
Public comprehensive	97,131	96.8	3.3
Private comprehensive	36,842	94.1	5.9
Private liberal arts	38,446	94.2	5.8
Public 2-year	96,144	97.9	2.1
Other[3]	21,528	97.7	2.3

[1] All accredited, nonproprietary U.S. postsecondary institutions that grant a 2-year (A.A.) or higher degree and whose accreditation at the higher education level is recognized by the U.S. Department of Education.

[2] Includes institutions classified by the Carnegie Foundation as specialized medical schools.

[3] Public liberal arts, private 2-year, and religious and other specialized institutions, except medical.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey" and 1988 National Survey of Postsecondary Faculty, "Faculty Survey."

Table 2.16—Number and percentage of full-time higher education instructional faculty and staff in 4-year institutions, by U.S. citizenship status and program area: Fall 1987 and Fall 1992

Program area and year	Full-time instructional faculty and staff	Citizenship status	
		Citizen	Non-citizen
1992			
All program areas in 4-year institutions*	405,783	92.5	7.5
Agriculture/home economics	9,698	97.6	2.4
Business	28,895	92.4	7.6
Education	30,127	98.3	1.7
Engineering	20,381	84.0	16.0
Fine arts	26,874	97.0	3.0
Humanities	54,093	93.0	7.0
Natural sciences	79,663	88.5	11.6
Social sciences	48,030	92.3	7.7
All other fields	44,346	95.2	4.9
1987			
All program areas in 4-year institutions*	414,832	94.5	5.5
Agriculture/home economics	10,104	98.0	2.0
Business	28,630	92.4	7.6
Education	31,812	98.8	1.2
Engineering	20,915	85.9	14.2
Fine arts	27,628	98.1	1.9
Humanities	60,781	95.1	4.9
Natural sciences	74,852	91.6	8.4
Social sciences	47,324	94.5	5.5
All other fields	29,042	96.7	3.3

* Health sciences faculty are included in the program area total but are not shown separately. See Technical Notes for details.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey" and 1988 National Survey of Postsecondary Faculty, "Faculty Survey."

SECTION 3

THE WORK OF FULL-TIME INSTRUCTIONAL FACULTY AND STAFF: FALL, 1987 AND FALL, 1992

Introduction

By definition, instructional faculty and staff, the focus of this report, all have instructional responsibilities. Their work lives encompass far more than instruction, however. Instructional faculty and staff may conduct research, participate in department or institution-wide committees, serve in other administrative capacities, or be involved in public service activities. Colleges and universities set policies that dictate certain aspects of a faculty member's work, such as the number of courses they must teach; institutions also set expectations, both formally and informally, regarding other aspects of faculty work, such as research and publishing, administrative responsibilities, and service.

Some colleges and universities, in an effort to reduce costs, increased faculty teaching loads in the early 1990s.[18] Other institutions reported increasing the size of classes, either eliminating courses that attracted small numbers of students or merging smaller sections of the same classes.[19] These actions reduced costs by having existing faculty take on larger teaching loads to accommodate more students.

If institutions changed their policies regarding teaching or other work-related activities in the early 1990s, changes should be apparent in responses to several of the questions asked of faculty on the NSOPF-88 and NSOPF-93 surveys. This section examines issues such as the length of the faculty work week, the allocation of time among different activities, classroom workload, research productivity, satisfaction with workload, and perception of workload pressures. The analysis in this section only includes full-time instructional faculty and staff.[20]

The Faculty Work Week

Although some colleges and universities reported increasing teaching loads, there was no change between the fall of 1987 and the fall of 1992 in the overall duration of the work week of full-time instructional faculty and staff. Across all types of higher education institutions, the average work week for full-time instructional faculty and staff was 52.7 hours in the fall of 1987 and 52.5 hours in the fall of 1992 (table 3.1). The average work week for full-time instructional faculty and staff at 4-year colleges and universities was 54.0 hours in the fall of 1987 and 54.2 hours in the fall of 1992 (table 3.2).

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[18] American Association of State Colleges and Universities, *Wise Choices for Tough times* (Washington, DC: American Association of State Colleges and Universities), 1993.

[19] Elaine El-Khawas, *Campus Trends*, 1991 (Washington, DC: American Council on Education, July 1991.

[20] See Appendix A for tables presenting data for part-time instructional faculty and staff.

There was no change in the average number of hours worked per week for full-time instructional faculty and staff between the fall of 1987 and the fall of 1992 in any type of institution (table 3.1). Nor did the average work week of full-time instructional faculty and staff in 4-year institutions increase for any of the program areas highlighted in this report (table 3.2).

Allocation of Time

The overall distribution of how instructional faculty and staff spend their time at work did not change between the fall of 1987 and the fall of 1992. In both years, full-time instructional faculty and staff across all types of higher education institutions allocated the majority of their time to teaching activities,[21] although instructional faculty and staff reported spending a higher percentage of their time on teaching activities in the fall of 1987 than in the fall of 1992 (57 and 54 percent in the fall of 1987 and the fall of 1992, respectively). Research[22] was the activity to which faculty allocated the second largest percentage of time (17 and 18 percent in the fall of 1987 and the fall of 1992, respectively). The remainder of faculty time was allocated to administrative or "other activities"[23] in the fall of 1987 and the fall of 1992.

Although, there was no change by institutional type between the fall of 1987 and the fall of 1992 in how full-time instructional faculty and staff allocated their time to various work activities, this allocation varied considerably across different types of academic institutions. At private research universities, full-time instructional faculty and staff reported allocating approximately 35 percent of their time to teaching in the fall of 1992; at public 2-year colleges, the average percentage of time spent in teaching was 69 percent. In addition, full-time instructional faculty and staff at private research universities reported spending an average of 35 percent of their time in research in the fall of 1992, while full-time instructional faculty and staff at public 2-year colleges spent an average of 5 percent of their time in this activity. These differences reflect the very different missions of these two types of institutions (table 3.3).

In the program areas of business, education, and engineering, there was a decrease between the fall of 1987 and the fall of 1992 in the percentage of time full-time instructional faculty and staff allocated to teaching activities in 4-year institutions (table 3.4).

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[21] Teaching activities included teaching, grading papers, preparing courses; developing new curricula; advising or supervising students; and working with student organizations or intramural athletics.

[22] Research activities included research; reviewing or preparing articles or books; attending or preparing for professional meetings or conferences; reviewing proposals; seeking outside funding; and giving performances or exhibitions in the fine or applied arts, or giving speeches.

[23] Other activities included professional growth (including taking courses, pursuing an advanced degree; other professional development activities, such as practice or activities to remain current in your field), outside consulting or freelance work, and service/other non-teaching activities (including providing legal or medical services or psychological counseling to clients or patients; paid or unpaid community or public service, service to professional societies/associations; and other activities or work not listed in any of the other activities).

Instructional Workload

The instructional workload of full-time instructional faculty and staff increased between the fall of 1987 and the fall of 1992, however. One measure of instructional workload is student contact hours, which is defined as the product of total classroom hours per week and total number of students enrolled in a class. Student contact hours increased from 300 in the fall of 1987 to 337 in the fall of 1992. The mean number of classroom hours also increased from 9.8 hours in the fall of 1987 to 11.0 hours in the fall of 1992 (table 3.5). The overall increase in classroom workload could have implications for the instructional costs incurred by higher education institutions. An increased workload (especially if it is not accompanied by an increase in faculty salaries to accommodate the additional work) is one way for institutions to lessen the impact of any revenue shortfalls they may experience.

The mean increase in the number of classroom hours between 1987 and 1992 (table 3.5) suggests that the decrease seen in teaching activities over this same time period (table 3.3) may have occurred because full-time faculty were spending less time on grading papers, preparing for courses, developing new curricula, advising or supervising students, and/or working with student organizations or intramural athletics in 1992 than in 1987.

There were no differences between the fall of 1987 and the fall of 1992 in the average number of contact hours full-time instructional faculty and staff spent with students at any particular type of institution included in this report (table 3.5).[24]

Full-time instructional faculty and staff at public doctoral and public 2-year institutions did experience increases in the average number of hours spent teaching in the classroom between the fall of 1987 and the fall of 1992. For faculty at public doctoral institutions, average number of classroom hours increased from 8.1 in the fall of 1987 to 9.7 in the fall of 1992; likewise, for faculty at public 2-year institutions, classroom hours increased from 15.1 to 16.3 over this same time period (table 3.5).

The average number of student contact hours for full-time instructional faculty and staff teaching at 4-year colleges and universities increased from 272 in 1987 to 303 in 1992; the average number of hours full-time instructional faculty and staff spent in the classroom also increased from 1987 to 1992 (8.5 to 9.4, respectively) (table 3.6). However, there were no increases in student contact hours and classroom hours for specific program areas between the fall of 1987 and the fall of 1992.

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[24] Although it may appear that there was an increase in contact hours for full-time instructional faculty and staff at public doctoral institutions between the fall of 1987 and the fall of 1992, this difference is not statistically significant. See standard error tables in Appendix C and the technical notes in Appendix B regarding the accuracy of the estimates.

Research Productivity

Research productivity, as measured by the number of publications and presentations produced in the last two years, remained about the same for full-time instructional faculty and staff between the fall of 1987 and the fall of 1992 (table 3.7). The notable exception is the slight decline over this time period in the average number of works published in non-refereed journals. The average number of reviews and articles and creative works published in nonrefereed journals or nonjuried media decreased from 1.8 in the two years before the fall of 1987 to 1.4 in the two years before the fall of 1992 (table 3.7). Changes in the instructional workload of full-time instructional faculty and staff may partially explain this trend toward decreased research activity. Although the average number of hours worked per week for full-time instructional faculty and staff did not change between the fall of 1987 and the fall of 1992 (see table 3.1), there were changes in classroom workload during this time period (see tables 3.5 and 3.6). While it may be logical to assume that this increased classroom focus may result in less time for research activities, this phenomenon is not supported by table 3.3, which shows no change overall in the percentage of time spent in research activities from the fall of 1987 to the fall of 1992.

In general, there was little change over time in the average number of publications, presentations, and patents/copyrights of full-time instructional faculty and staff at the various types of institutions. Two exceptions were an increase from the fall of 1987 to the fall of 1992 in the average number of presentations and exhibits of full-time instructional faculty and staff at private research institutions during the previous 2 years (from 4.1 to 6.5), and a decrease from the fall of 1987 to the fall of 1992 in the average number of reviews and articles published in the recent past in nonrefereed journals by full-time instructional faculty and staff at public 2-year institutions (from 1.2 to .5) (table 3.7).

Full-time instructional faculty and staff in public and private research institutions published an average of 3.8 and 4.5 articles and creative works, respectively, in refereed journals in the two years preceding the fall of 1992; this research productivity was more than that of faculty at any other type of institution. At the other extreme, full-time instructional faculty and staff at public 2-year colleges published only 0.2 articles and creative works in refereed journals in the two years preceding the fall of 1992, and 0.4 such works in the earlier time period.

Across program areas in 4-year institutions, the number of publications, presentations, and patents/copyrights highlighted in this report was relatively stable between the fall of 1987 and the fall of 1992, except for a decline in the number of reviews and non-refereed articles and non-juried creative works published by full-time instructional faculty and staff in the humanities: the average number of these publications decreased from 2.7 in the two years preceding the fall of 1987 to 1.8 in the two years preceding the fall of 1992 (table 3.8).

Satisfaction with Workload

The satisfaction of faculty with their workload is one way to gauge the impact of work-related changes on faculty. Full-time instructional faculty and staff were somewhat more satisfied with their workload in the fall of 1987 than in the fall of 1992. In the fall of 1987, 35 percent of full-time instructional faculty and staff were very satisfied with their workload, 38 percent were somewhat satisfied, and only 27 percent were dissatisfied. (Responses of very dissatisfied and somewhat dissatisfied have been combined and reported as "dissatisfied" in this report). In the fall of 1992, 28 percent were very satisfied with their workload, 40 percent were somewhat satisfied, and 32 percent were dissatisfied. Thus the number reporting that they were "very satisfied" decreased by 7 percentage points, and the number dissatisfied increased by 5 percentage points. It is still the case that a majority (68 percent) of full-time instructional faculty and staff were somewhat or very satisfied with their workload in the fall of 1992 (table 3.9). Decreases in the satisfaction of full-time instructional faculty and staff with their workload would not be altogether unexpected, given the increases in their classroom workload described previously.

There was a decline in the percentage of full-time instructional faculty and staff at both public and private research institutions who were very satisfied with their workload between the fall of 1987 and the fall of 1992. For example, 44 percent of full-time instructional faculty and staff at private research institutions reported that they were very satisfied with their workload in the fall of 1987; however, by the fall of 1992, only 31 percent indicated that they were very satisfied with their workload at private research institutions (table 3.9).

Satisfaction levels with the workload of full-time instructional faculty and staff at 4-year institutions decreased between the fall of 1987 and the fall of 1992, although declines were not realized for any specific program area in 4-year institutions (table 3.10).

Pressure to Increase Workload

Additional information pertaining to faculty perceptions of their workload is available in response to a new question added to the NSOPF-93 faculty survey. One-half (51 percent) of full-time instructional faculty and staff indicated that the pressure to increase their workload had worsened in recent years at their institution, 34 percent believed it had stayed the same, and only 8 percent believed it had improved (table 3.11).[25]

Full-time instructional faculty and staff at publicly controlled research and doctoral institutions were much more likely to state that pressure to increase their workload had worsened in previous years rather than remained the same or improved when compared to instructional staff at privately controlled research and doctoral institutions. The opinion that workload pressure had increased was voiced by 62 percent of full-time instructional faculty and staff at public research institutions and 60 percent at public doctoral institutions. In contrast, 46 and 41 percent of full-time instructional faculty and staff at privately controlled research and doctoral institutions, respectively, reported that pressure to increase their workload had worsened in previous years (table 3.11). These public/private differences could reflect changing state and institutional policies in the public sector to increase faculty teaching loads as a cost cutting measure.

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[25] Six percent of full-time instructional faculty and staff did not indicate whether or not pressure to increase workload had improved, worsened, or stayed the same.

Among program areas in 4-year institutions, the proportion of full-time instructional faculty and staff believing that work pressures have worsened in recent years averaged about 52 percent. The proportion that believed work pressures have stayed the same averaged about one-third. Finally, the proportion of full-time instructional faculty and staff in 4-year institutions that believed pressure to increase workload had improved was about 9 percent across the various program areas (table 3.12).

Conclusion

Full-time instructional faculty and staff were less satisfied with their workload in the fall of 1992 than they were in the fall of 1987. Additionally, about one-half of the full-time instructional faculty and staff in the fall of 1992 stated that the pressure to increase workload had increased in recent years. While there is no evidence of an increase in the mean number of hours worked per week, there is evidence of an increase in classroom workload: there was an increase both in student contact hours and the mean number of classroom hours.

Although the percentage of time full-time instructional faculty and staff spent on teaching activities declined between 1987 and 1992, the reader is reminded that teaching activities include much more than time spent teaching in the classroom, which increased between the fall of 1987 and the fall of 1992. Teaching activities also includes time spent grading papers, preparing for classes, developing new curricula, advising or supervising students, and working with student organizations or intramural athletics. And it is more than likely that full-time instructional faculty were spending less time on one or more of these teaching activities in the fall of 1992 than the fall of 1987.

There was, moreover, a slight decline in the average number of reviews and articles published in nonrefereed journals by full-time instructional staff. However, productivity as measured by other types of publications and presentations remained about the same for full-time instructional faculty and staff between 1987 and 1992.

Table 3.1—Mean number of hours worked by full-time instructional faculty and staff, by type and control of institution: Fall 1987 and Fall 1992

Type and control of institution and year	Full-time instructional faculty and staff	Mean hours worked per week
1992		
All institutions[1]	528,260	52.5
Public research	107,358	56.4
Private research	32,164	57.6
Public doctoral[2]	52,808	55.1
Private doctoral[2]	28,684	53.4
Public comprehensive	94,477	52.4
Private comprehensive	38,561	51.9
Private liberal arts	38,052	52.5
Public 2-year	109,957	46.9
Other[3]	26,200	49.0
1987		
All institutions[1]	515,138	52.7
Public research	102,115	56.8
Private research	41,574	56.1
Public doctoral[2]	56,294	54.7
Private doctoral[2]	25,065	52.2
Public comprehensive	97,131	52.7
Private comprehensive	36,842	51.2
Private liberal arts	38,446	52.5
Public 2-year	96,144	46.9
Other[3]	21,528	51.9

[1] All accredited, nonproprietary U.S. postsecondary institutions that grant a 2-year (A.A.) or higher degree and whose accreditation at the higher education level is recognized by the U.S. Department of Education.

[2] Includes institutions classified by the Carnegie Foundation as specialized medical schools.

[3] Public liberal arts, private 2-year, and religious and other specialized institutions, except medical.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey" and 1988 National Survey of Postsecondary Faculty, "Faculty Survey."

Table 3.2—Mean number of hours worked by full-time instructional faculty and staff in 4-year institutions, by program area: Fall 1987 and Fall 1992

Program area and year	Full-time instructional faculty and staff	Mean hours worked per week
1992		
All program areas in 4-year institutions*	405,783	54.2
Agriculture/home economics	9,698	56.5
Business	28,895	52.7
Education	30,127	52.5
Engineering	20,381	56.7
Fine arts	26,874	51.5
Humanities	54,093	52.0
Natural sciences	79,663	55.2
Social sciences	48,030	54.2
All other fields	44,346	53.8
1987		
All program areas in 4-year institutions*	414,832	54.0
Agriculture/home economics	10,104	55.4
Business	28,630	52.7
Education	31,812	51.4
Engineering	20,915	55.0
Fine arts	27,628	52.9
Humanities	60,781	53.2
Natural sciences	74,852	54.0
Social sciences	47,324	53.5
All other fields	29,042	52.7

* Health sciences faculty are included in the program area total but are not shown separately. See Technical Notes for details.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey" and 1988 National Survey of Postsecondary Faculty, "Faculty Survey."

Table 3.3—Percentage distribution of full-time instructional faculty and staff, by time allocation and type and control of institution: Fall 1987 and Fall 1992

Type and control of institution and year	Full-time instructional faculty and staff	Percentage of time spent			
		Teaching activities	Research activities	Administrative activities	Other activities
1992					
All institutions[1]	528,260	54.4	17.6	13.1	14.7
Public research	107,358	40.4	31.5	12.9	15.2
Private research	32,164	34.6	35.3	12.8	16.8
Public doctoral[2]	52,808	46.8	23.8	13.2	16.1
Private doctoral[2]	28,684	44.5	21.7	15.7	18.1
Public comprehensive	94,477	60.2	14.0	12.0	13.7
Private comprehensive	38,561	59.5	11.8	14.6	13.8
Private liberal arts	38,052	63.5	9.6	14.7	11.8
Public 2-year	109,957	68.7	4.5	12.0	14.6
Other[3]	26,200	60.8	10.7	14.9	13.5
1987					
All institutions[1]	515,138	57.1	17.3	13.2	12.5
Public research	102,115	43.6	30.1	13.9	12.3
Private research	41,574	42.1	30.6	13.2	14.2
Public doctoral[2]	56,294	47.8	22.8	14.7	14.7
Private doctoral[2]	25,065	41.1	26.4	12.8	19.6
Public comprehensive	97,131	63.5	12.3	12.8	11.4
Private comprehensive	36,842	63.7	11.2	14.2	11.0
Private liberal arts	38,446	66.8	10.5	13.8	9.0
Public 2-year	96,144	73.3	4.2	10.9	11.6
Other[3]	21,528	63.6	8.8	15.2	12.5

[1] All accredited, nonproprietary U.S. postsecondary institutions that grant a 2-year (A.A.) or higher degree and whose accreditation at the higher education level is recognized by the U.S. Department of Education.

[2] Includes institutions classified by the Carnegie Foundation as specialized medical schools.

[3] Public liberal arts, private 2-year, and religious and other specialized institutions, except medical.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey" and 1988 National Survey of Postsecondary Faculty, "Faculty Survey."

Table 3.4—Percentage distribution of full-time instructional faculty and staff in 4-year institutions, by time allocation and program area: Fall 1987 and Fall 1992

Program area and year	Full-time instructional faculty and staff	Percentage of time spent			
		Teaching activities	Research activities	Administrative activities	Other activities
1992					
All program areas in 4-year institutions*	405,783	50.8	21.1	13.2	14.7
Agriculture/home economics	9,698	42.1	30.7	13.0	14.2
Business	28,895	54.1	17.9	12.1	15.7
Education	30,127	53.8	13.1	16.5	16.2
Engineering	20,381	48.5	28.1	11.2	12.0
Fine arts	26,874	56.5	15.4	12.3	15.6
Humanities	54,093	59.7	17.8	13.1	9.1
Natural sciences	79,663	50.0	29.1	11.1	9.7
Social sciences	48,030	50.5	23.6	13.4	12.2
All other fields	44,346	52.9	16.1	15.6	15.2
1987					
All program areas in 4-year institutions*	414,832	53.2	20.4	13.7	12.6
Agriculture/home economics	10,104	50.4	27.6	13.4	8.7
Business	28,630	60.3	16.0	11.5	12.2
Education	31,812	61.5	11.2	16.2	11.1
Engineering	20,915	56.2	22.4	12.3	9.1
Fine arts	27,628	55.2	19.3	11.9	13.6
Humanities	60,781	62.2	16.9	14.5	6.5
Natural sciences	74,852	53.8	26.7	12.3	7.2
Social sciences	47,324	54.3	22.1	14.0	9.7
All other fields	29,042	59.8	14.1	14.2	11.9

* Health sciences faculty are included in the program area total but are not shown separately. See Technical Notes for details.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey" and 1988 National Survey of Postsecondary Faculty, "Faculty Survey."

Table 3.5—Mean number of classroom hours and student contact hours of full-time instructional faculty and staff, by type and control of institution: Fall 1987 and Fall 1992

Type and control of institution and year	Full-time instructional faculty and staff	Mean classroom hours	Mean student contact hours[1]
1992			
All institutions[2]	528,260	11.0	337.4
Public research	107,358	6.9	281.3
Private research	32,164	7.1	231.7
Public doctoral[3]	52,808	9.7	337.1
Private doctoral[3]	28,684	8.3	395.6
Public comprehensive	94,477	10.9	337.0
Private comprehensive	38,561	10.6	273.6
Private liberal arts	38,052	11.0	242.4
Public 2-year	109,957	16.3	457.3
Other[4]	26,200	12.9	321.4
1987			
All institutions[2]	515,138	9.8	300.4
Public research	102,115	6.7	263.5
Private research	41,574	5.9	225.5
Public doctoral[3]	56,294	8.1	285.9
Private doctoral[3]	25,065	6.7	200.1
Public comprehensive	97,131	10.4	316.7
Private comprehensive	36,842	10.8	276.1
Private liberal arts	38,446	10.5	234.5
Public 2-year	96,144	15.1	420.8
Other[4]	21,528	10.8	322.6

[1] Number of hours per week spent teaching classes, multiplied by the number of students in those classes.

[2] All accredited, nonproprietary U.S. postsecondary institutions that grant a 2-year (A.A.) or higher degree and whose accreditation at the higher education level is recognized by the U.S. Department of Education.

[3] Includes institutions classified by the Carnegie Foundation as specialized medical schools.

[4] Public liberal arts, private 2-year, and religious and other specialized institutions, except medical.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey" and 1988 National Survey of Postsecondary Faculty, "Faculty Survey."

Table 3.6—Mean number of classroom hours and student contact hours of full-time instructional faculty and staff in 4-year institutions, by program area: Fall 1987 and Fall 1992

Program area and year	Full-time instructional faculty and staff	Mean classroom hours	Mean student contact hours[1]
1992			
All program areas in 4-year institutions[2]	405,783	9.4	303.4
Agriculture/home economics	9,698	8.5	229.2
Business	28,895	9.4	299.5
Education	30,127	10.0	270.4
Engineering	20,381	7.7	223.3
Fine arts	26,874	11.9	252.2
Humanities	54,093	9.6	257.7
Natural sciences	79,663	8.5	338.7
Social sciences	48,030	8.6	309.2
All other fields	44,346	9.7	281.5
1987			
All program areas in 4-year institutions[2]	414,832	8.5	272.3
Agriculture/home economics	10,104	7.1	226.9
Business	28,630	9.0	300.6
Education	31,812	9.1	227.5
Engineering	20,915	7.8	249.5
Fine arts	27,628	11.1	245.1
Humanities	60,781	9.3	248.6
Natural sciences	74,852	7.9	311.9
Social sciences	47,324	8.0	301.1
All other fields	29,042	9.4	267.0

[1] Number of hours per week spent teaching classes, multiplied by the number of students in those classes.

[2] Health sciences faculty are included in the program area total but are not shown separately. See Technical Notes for details.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey" and 1988 National Survey of Postsecondary Faculty, "Faculty Survey."

Table 3.7—Mean number of publications and presentations in the past two years by full-time instructional faculty and staff, by type and control of institution: Fall 1987 and Fall 1992

Type and control of institution and year	Full-time instructional faculty and staff	Refereed or juried publications	Reviews and non-refereed publications	Books and book chapters	Monographs and technical reports	Presentations and exhibits	Patents, copyrights, and software
1992							
All institutions[1]	528,260	1.9	1.4	0.5	0.9	4.4	0.1
Public research	107,358	3.8	2.0	0.9	1.5	6.3	0.2
Private research	32,164	4.5	2.1	1.2	1.3	6.5	0.3
Public doctoral[2]	52,808	2.9	1.6	0.7	1.2	5.9	0.2
Private doctoral[2]	28,684	2.3	1.6	0.7	0.9	4.1	0.1
Public comprehensive	94,477	1.2	1.5	0.4	1.0	4.3	0.1
Private comprehensive	38,561	0.9	1.1	0.4	0.8	3.9	0.1
Private liberal arts	38,052	0.9	1.3	0.3	0.6	3.8	0.1
Public 2-year	109,957	0.2	0.5	0.1	0.4	1.8	0.1
Other[3]	26,200	0.8	1.4	0.3	0.7	3.8	0.1
1987							
All institutions[1]	515,138	2.1	1.8	0.6	1.0	4.4	0.3
Public research	102,115	4.1	2.0	1.0	1.6	5.8	0.2
Private research	41,574	4.3	1.9	1.3	0.7	4.1	0.4
Public doctoral[2]	56,294	2.9	2.1	0.7	1.1	5.1	0.2
Private doctoral[2]	25,065	3.8	1.6	1.0	0.7	6.4	0.1
Public comprehensive	97,131	1.2	2.0	0.4	1.1	4.8	0.3
Private comprehensive	36,842	1.1	1.7	0.3	1.0	4.1	0.2
Private liberal arts	38,446	0.9	1.6	0.3	0.5	3.2	0.2
Public 2-year	96,144	0.4	1.2	0.2	0.6	2.6	0.4
Other[3]	21,528	1.0	1.6	0.4	0.9	4.2	0.1

[1] All accredited, nonproprietary U.S. postsecondary institutions that grant a 2-year (A.A.) or higher degree and whose accreditation at the higher education level is recognized by the U.S. Department of Education.

[2] Includes institutions classified by the Carnegie Foundation as specialized medical schools.

[3] Public liberal arts, private 2-year, and religious and other specialized institutions, except medical.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey" and 1988 National Survey of Postsecondary Faculty, "Faculty Survey."

Table 3.8—Mean number of publications and presentations in the past two years by full-time instructional faculty and staff in 4-year institutions, by program area: Fall 1987 and Fall 1992

Program area and year	Full-time instructional faculty and staff	Refereed or juried publications	Reviews and non-refereed publications	Books and book chapters	Monographs and technical reports	Presentations and exhibits	Patents, copyrights, and software
1992							
All program areas in 4-year institutions*	405,783	2.4	1.6	0.6	1.1	5.1	0.2
Agriculture/home economics	9,698	3.8	5.0	0.6	2.7	7.0	0.2
Business	28,895	1.9	1.3	0.5	1.3	2.9	0.2
Education	30,127	1.3	1.7	0.5	1.2	5.8	0.1
Engineering	20,381	3.7	1.9	0.5	2.8	5.3	0.4
Fine arts	26,874	0.9	1.5	0.3	0.3	18.3	0.2
Humanities	54,093	1.4	1.8	0.8	0.4	3.1	0.1
Natural sciences	79,663	3.7	1.1	0.5	1.1	3.5	0.2
Social sciences	48,030	1.9	1.8	0.9	1.2	4.1	0.1
All other fields	44,346	1.2	2.1	0.6	1.2	3.8	0.1
1987							
All program areas in 4-year institutions*	414,832	2.5	1.9	0.7	1.1	4.9	0.2
Agriculture/home economics	10,104	3.1	3.1	0.5	1.6	4.7	0.3
Business	28,630	1.4	1.1	0.4	0.9	2.0	0.2
Education	31,812	1.5	2.0	0.5	1.0	5.1	0.2
Engineering	20,915	2.7	1.7	0.5	2.1	3.2	0.7
Fine arts	27,628	0.9	1.6	0.2	0.3	15.9	0.3
Humanities	60,781	1.6	2.7	0.8	0.3	3.2	0.1
Natural sciences	74,852	3.3	1.2	0.5	1.6	3.0	0.4
Social sciences	47,324	2.2	2.0	1.0	1.0	3.4	0.1
	29,042	1.2	3.1	0.4	1.4	4.0	0.1

* Health sciences faculty are included in the program area total but are not shown separately. See Technical Notes for details.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey" and 1988 National Survey of Postsecondary Faculty, "Faculty Survey."

Table 3.9—Percentage distribution of full-time instructional faculty and staff, by satisfaction with work load and type and control of institution: Fall 1987 and Fall 1992

Type and control of institution and year	Full-time instructional faculty and staff	Satisfaction with work load		
		Dissatisfied[1]	Somewhat satisfied	Very satisfied
1992				
All institutions[2]	528,260	31.6	40.4	28.0
Public research	107,358	28.3	42.2	29.5
Private research	32,164	26.4	42.5	31.1
Public doctoral[3]	52,808	32.7	39.2	28.1
Private doctoral[3]	28,684	28.5	41.2	30.3
Public comprehensive	94,477	37.5	39.0	23.5
Private comprehensive	38,561	34.6	39.1	26.4
Private liberal arts	38,052	35.8	41.7	22.6
Public 2-year	109,957	29.6	40.0	30.3
Other[4]	26,200	29.3	39.3	31.5
1987				
All institutions[2]	515,138	27.1	38.0	34.9
Public research	102,115	23.3	39.2	37.5
Private research	41,574	21.9	34.4	43.8
Public doctoral[3]	56,294	28.3	39.0	32.7
Private doctoral[3]	25,065	23.2	35.6	41.2
Public comprehensive	97,131	34.6	35.8	29.6
Private comprehensive	36,842	32.7	36.5	30.9
Private liberal arts	38,446	35.0	38.3	26.7
Public 2-year	96,144	21.4	41.7	36.8
Other[4]	21,528	24.1	35.7	40.2

[1] Percentage who said "very dissatisfied" or "somewhat dissatisfied."

[2] All accredited, nonproprietary U.S. postsecondary institutions that grant a 2-year (A.A.) or higher degree and whose accreditation at the higher education level is recognized by the U.S. Department of Education.

[3] Includes institutions classified by the Carnegie Foundation as specialized medical schools.

[4] Public liberal arts, private 2-year, and religious and other specialized institutions, except medical.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey" and 1988 National Survey of Postsecondary Faculty, "Faculty Survey."

Table 3.10—Percentage distribution of full-time instructional faculty and staff in 4-year institutions, by satisfaction with work load and program area: Fall 1987 and Fall 1992

Program area and year	Full-time instructional faculty and staff	Satisfaction with work load		
		Dissatisfied[1]	Somewhat satisfied	Very satisfied
1992				
All program areas in 4-year institutions[2]	405,783	32.2	40.7	27.1
Agriculture/home economics	9,698	35.5	37.9	26.6
Business	28,895	24.2	42.2	33.7
Education	30,127	30.9	40.9	28.1
Engineering	20,381	34.6	38.5	26.9
Fine arts	26,874	38.7	38.4	22.9
Humanities	54,093	36.6	36.8	26.6
Natural sciences	79,663	28.5	41.8	29.6
Social sciences	48,030	31.9	42.3	25.9
All other fields	44,346	32.5	40.3	27.2
1987				
All program areas in 4-year institutions[2]	414,832	28.6	37.2	34.3
Agriculture/home economics	10,104	27.0	36.8	36.2
Business	28,630	22.4	36.7	40.9
Education	31,812	29.1	36.9	34.0
Engineering	20,915	29.1	40.1	30.8
Fine arts	27,628	33.9	34.0	32.1
Humanities	60,781	34.0	35.3	30.7
Natural sciences	74,852	26.8	38.6	34.7
Social sciences	47,324	33.5	35.5	31.0
	29,042	26.2	37.3	36.5

[1] Percentage who said "very dissatisfied" or "somewhat dissatisfied."

[2] Health sciences faculty are included in the program area total but are not shown separately. See Technical Notes for details.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey" and 1988 National Survey of Postsecondary Faculty, "Faculty Survey."

Table 3.11—Percentage distribution of full-time instructional faculty and staff, by perception of pressure to increase work load in recent years and type and control of institution: Fall 1992

Type and control of institution and year	Full-time instructional faculty and staff	Worsened	Stayed the same	Improved	Don't know
1992					
All institutions[1]	528,260	51.2	34.4	8.3	6.1
Public research	107,358	61.9	25.3	7.2	5.5
Private research	32,164	45.6	41.2	5.5	7.7
Public doctoral[2]	52,808	60.1	27.2	6.9	5.8
Private doctoral[2]	28,684	40.8	42.0	10.1	7.2
Public comprehensive	94,477	53.6	32.6	8.4	5.4
Private comprehensive	38,561	36.4	44.3	12.8	6.5
Private liberal arts	38,052	40.2	39.7	13.4	6.8
Public 2-year	109,957	49.3	38.6	6.4	5.8
Other[3]	26,200	45.1	36.8	10.2	7.9

[1] All accredited, nonproprietary U.S. postsecondary institutions that grant a 2-year (A.A.) or higher degree and whose accreditation at the higher education level is recognized by the U.S. Department of Education.

[2] Includes institutions classified by the Carnegie Foundation as specialized medical schools.

[3] Public liberal arts, private 2-year, and religious and other specialized institutions, except medical.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey."

Table 3.12—Percentage distribution of full-time instructional faculty and staff in 4-year institutions, by perception of pressure to increase work load in recent years and program area: Fall 1992

Program area and year	Full-time instructional faculty and staff	Worsened	Stayed the same	Improved	Don't know
1992					
All program areas in 4-year institutions*	405,783	52.0	33.2	8.9	6.0
Agriculture/home economics	9,698	57.5	26.2	13.0	3.4
Business	28,895	47.7	36.5	9.9	5.9
Education	30,127	50.8	32.0	11.3	5.9
Engineering	20,381	53.1	33.5	8.6	4.9
Fine arts	26,874	49.0	33.7	10.0	7.3
Humanities	54,093	50.4	34.1	10.0	5.5
Natural sciences	79,663	50.6	36.9	7.5	5.1
Social sciences	48,030	52.8	33.1	8.5	5.6
All other fields	44,346	48.2	32.9	10.0	8.9

* Health sciences faculty are included in the program area total but are not shown separately. See Technical Notes for details.

SOURCE: U.S. Department of Education, National Center for Education Statistics, "1993 National Study of Postsecondary Faculty."

SECTION 4

MONETARY COMPENSATION OF FULL-TIME INSTRUCTIONAL FACULTY AND STAFF: FALL, 1987 AND FALL, 1992

This section provides information on the monetary compensation received by full-time, higher education instructional faculty and staff in 1987 and 1992. Higher education is a labor intensive industry and faculty salaries comprise a major portion of the academic expenditures of these institutions. Holding down the salaries of faculty is one of the more direct ways that colleges and universities can reduce their costs.

If institutions made an effort to hold down faculty salaries between 1987 and 1992, it will be evident from the data presented in this section. It will also be possible to explore the extent to which faculty augment the basic salaries they receive from the institution with other sources of income, such as consulting or other outside income. Increases in these types of income may suggest that basic salaries have not increased sufficiently to meet their needs.

The text and tables in this section examine income of full-time instructional faculty and staff from four different sources:

- Basic salary from the institution;
- Other income from the institution, (including income for additional teaching activities, e.g., for summer session; supplements not included in basic salary, for administration, research, coaching sports, etc.; the estimated value of nonmonetary compensation, e.g., food, housing, car; and any other income from the institution);
- Outside consulting income (including income from consulting work, a consulting business or freelance work); and
- Other outside income (including employment at another academic institution; legal or medical services or psychological counseling; self-owned business, other than consulting; professional performances or exhibitions; speaking fees and honoraria; royalties or commissions; non-monetary compensation; and any other employment).

The first set of tables show how total earned income and each of the four components of income vary across different types of institutions and program areas, and how compensation levels have changed between 1987 and 1992. Specific sources of income are then examined by type of institution and program area. Finally, several tables highlight the satisfaction of full-time instructional faculty and staff with their salary and benefits.

In order to examine changes in compensation that go beyond those caused by price inflation, all compensation data from 1987 were adjusted to 1992 levels using the Consumer Price Index for All Urban Consumers (CPI-U).[26]

Overall Monetary Compensation

The total earned income of full-time instructional faculty and staff kept pace with inflation between 1987 and 1992. In both years, faculty earned, on average, about $60,000 (in 1992 dollars) from all sources (table 4.1). All types of income remained relatively stable between these two years. The basic salary from the institution averaged about $48,500, other income from the institution averaged about $4,300, outside consulting income equaled about $2,100 and other outside income averaged about $5,500 in both periods.

The basic salary of full-time instructional faculty and staff averaged four-fifths of total earned income, and earnings from each of the three remaining sources (other income from the institution, outside consulting income and other outside income) averaged between 3 and 9 percent of total earned income. There were no significant changes among the various types of institutions included in the two surveys.

Changes in total earned income and its component parts did not vary by program area in 4-year institutions from 1987 to 1992. The one exception was an increase in outside income from sources other than consulting for full-time instructional faculty and staff in the humanities (from $1,700 in 1987 to $4,000 in 1992). Otherwise, income levels in 1992 were comparable to income levels in 1987 for full-time instructional faculty and staff in each of the program areas identified in this report (table 4.2).

Compensation by Source of Income

The percentages of faculty who reported that they received income from sources other than basic salary remained similar for other income from the institution and other outside income. About one-half of all instructional faculty and staff in both 1987 and 1992 indicated that they earned income from their institution other than their basic salary; this averaged about $8,300 in both years (table 4.3). The percentages of faculty who reported receiving other outside income was also stable at 44 percent. However, the percentages of faculty who indicated that they earned consulting income decreased from 26 percent to 23 percent (The change in the mean income from this source was not statistically significant).

Between 1987 and 1992, the percentage of full-time instructional faculty and staff who earned various types of income remained essentially the same across all types of institutions and program areas. During this time period, average earnings from various sources also remained essentially the same. The exceptions were an increase in the amount of consulting income earned by full-time instructional staff employed at public 2-year institutions (from about $3,500 in 1987 to $7,400 in 1992) and an increase in other outside income earned by full-time instructional faculty and staff in public comprehensive universities (from $7,600 in 1987 to $12,800 in 1992) (table 4.3).

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[26] Between 1987 and 1992, the CPI-U increased by 23.5 percent, reflecting an annual inflation rate of 4.3 percent.

With the exception of a decline in the percentage of full-time instructional faculty and staff in "other" fields, there were no significant differences by program area in the percentages of faculty receiving income from sources outside their salaries between 1987 and 1992 (table 4.4).

Satisfaction with Salary and Benefits

Overall dissatisfaction with salaries increased somewhat between 1987 and 1992; in 1987, 42 percent of full-time instructional faculty and staff were dissatisfied with their salaries, while in 1992, 45 percent indicated that they were dissatisfied (table 4.5).[27]

Despite what appear to be differences in satisfaction with salary across types of institutions in 1987 and in 1992, no statistically significant differences emerged. As noted in our discussion of tenure differences across these two time periods (see discussion in section 2), differences that are statistically significant across all faculty do not necessarily translate into significant differences across specific types of institutions or program areas.

Dissatisfaction with salary increased significantly for full-time faculty in the humanities in 4-year institutions, from 43 percent who were dissatisfied in 1987 to 52 percent in 1992 (table 4.6).

Overall satisfaction with benefits remained about the same between 1987 and 1992; in both years about three-quarters of full-time instructional faculty and staff indicated that they were satisfied with their benefits at their institutions (table 4.7). There were no differences across types of institutions in these two years, while the percentage of humanities faculty in 4-year institutions who were dissatisfied with their benefits increased from 24 to 30 percent over these two time periods (table 4.8).

Conclusion

There were relatively few changes in the monetary compensation of full-time instructional faculty and staff between 1987 and 1992, indicating that faculty salaries, on average, kept pace with, but did not exceed, inflation. Total earned income in both years was close to $60,000, of which about 80 percent was from basic salaries. The lack of an increase in salaries suggests that colleges and universities may be looking to faculty compensation as a way to manage costs. Any specific actions being taken by colleges and universities to hold faculty salaries constant cannot be ascertained from these data, however.

About one-half of the full-time instructional faculty and staff in both 1987 and 1992 earned income from their institution in addition to their basic salary, about one-quarter had some consulting income, and about 44 percent had other outside income. With few exceptions, full-time instructional faculty and staff have not increased their incomes from sources other than their basic salaries.

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[27] The "satisfied" response is the sum of those who responded "somewhat satisfied" or "very satisfied." The "dissatisfied" response is the sum of those who responded "somewhat dissatisfied" or "very dissatisfied."

Finally, there was a decrease in the reported satisfaction levels of full-time instructional faculty and staff with their salaries between 1987 and 1992. This corresponds with a lack of a true increase in faculty earnings discussed previously.

Table 4.1—Mean income of full-time instructional faculty and staff, by source of income and type and control of institution: Fall 1987 and Fall 1992

Type and control of institution and year	Full-time instructional faculty and staff	Total earned income	Source of income			
			Basic salary from institution	Other income from institution	Outside consulting income	Other outside income
1992						
All institutions[1]	528,260	60,613	48,411	4,327	2,143	5,731
Public research	107,358	73,928	59,504	5,039	2,710	6,675
Private research	32,164	86,504	65,031	7,640	4,906	8,928
Public doctoral[2]	52,808	64,845	52,823	4,663	2,009	5,349
Private doctoral[2]	28,684	74,527	58,826	3,860	2,250	9,591
Public comprehensive	94,477	54,429	43,393	3,930	1,707	5,399
Private comprehensive	38,561	55,499	43,592	3,978	3,022	4,908
Private liberal arts	38,052	44,979	37,555	2,423	1,808	3,193
Public 2-year	109,957	48,982	39,276	3,878	1,130	4,697
Other[3]	26,200	51,855	41,551	3,780	1,600	4,925
1987						
All institutions[1,4]	515,138	60,339	48,565	4,351	2,066	5,356
Public research	102,115	70,942	58,339	5,278	2,881	4,444
Private research	41,574	90,323	63,912	11,518	4,563	10,330
Public doctoral[2]	56,294	68,696	54,234	4,530	1,938	7,995
Private doctoral[2]	25,065	76,140	57,433	2,424	3,990	12,292
Public comprehensive	97,131	53,521	45,515	3,050	1,805	3,151
Private comprehensive	36,842	51,886	39,715	3,057	1,927	7,187
Private liberal arts	38,446	40,483	35,597	1,858	857	2,170
Public 2-year	96,144	47,707	39,999	3,685	606	3,417
Other[3]	21,528	49,097	37,842	3,393	1,581	6,281

[1] All accredited, nonproprietary U.S. postsecondary institutions that grant a 2-year (A.A.) or higher degree and whose accreditation at the higher education level is recognized by the U.S. Department of Education.

[2] Includes institutions classified by the Carnegie Foundation as specialized medical schools.

[3] Public liberal arts, private 2-year, and religious and other specialized institutions, except medical.

[4] The Consumer Price Index for All Urban Consumers (CPI-U) was used to adjust 1987 dollars to constant 1992 dollars.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey" and 1988 National Survey of Postsecondary Faculty, "Faculty Survey."

Table 4.2—Mean income of full-time instructional faculty and staff in 4-year institutions, by source of income and program area: Fall 1987 and Fall 1992

Program area and year	Full-time instructional faculty and staff	Total earned income	Source of income			
			Basic salary from institution	Other income from institution	Outside consulting income	Other outside income
1992						
All program areas in 4-year institutions[1]	405,783	64,288	51,253	4,520	2,456	6,059
Agriculture/home economics	9,698	62,439	53,181	2,138	3,568	3,552
Business	28,895	70,286	52,235	5,378	5,004	7,669
Education	30,127	52,794	42,592	4,265	1,618	4,319
Engineering	20,381	75,363	58,938	7,430	4,714	4,281
Fine arts	26,874	51,633	41,293	2,314	2,519	5,507
Humanities	54,093	48,721	41,277	2,811	620	4,013
Natural sciences	79,663	61,345	51,267	3,905	1,877	4,296
Social sciences	48,030	60,402	47,594	4,598	3,572	4,638
All other fields	44,346	60,014	47,252	3,900	2,571	6,291
1987						
All program areas in 4-year institutions[1,2]	414,832	63,485	50,758	4,514	2,418	5,795
Agriculture/home economics	10,104	54,757	51,271	1,358	818	1,310
Business	28,630	64,133	47,830	5,901	6,696	3,707
Education	31,812	48,725	40,489	4,130	1,295	2,812
Engineering	20,915	70,397	56,435	5,402	4,684	3,875
Fine arts	27,628	44,390	37,596	1,990	1,282	3,523
Humanities	60,781	47,222	42,462	2,470	565	1,726
Natural sciences	74,852	59,568	50,154	4,280	1,928	3,206
Social sciences	47,324	59,976	47,441	3,594	2,628	6,314
All other fields	29,042	57,663	46,061	4,230	2,695	4,676

[1] Health sciences faculty are included in the program area total but are not shown separately. See Technical Notes for details.

[2] The Consumer Price Index for All Urban Consumers (CPI-U) was used to adjust 1987 dollars to constant 1992 dollars.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey" and 1988 National Survey of Postsecondary Faculty, "Faculty Survey."

Table 4.3—Income for full-time instructional faculty and staff with income beyond basic salary from institution, by source of income and type and control of institution: Fall 1987 and Fall 1992

Type and control of institution and year	Other income from institution			Consulting income			Other outside income		
	Number[1]	Percent of total	Mean	Number[1]	Percent of total	Mean	Number[1]	Percent of total	Mean
1992									
All institutions[2]	272,948	51.7	8,375	122,967	23.3	9,207	234,616	44.4	12,905
Public research	46,625	43.4	11,603	31,456	29.3	9,250	53,144	49.5	13,484
Private research	13,814	43.0	17,788	9,800	30.5	16,101	16,476	51.2	17,429
Public doctoral[3]	25,587	48.5	9,623	13,028	24.7	8,145	23,308	44.1	12,120
Private doctoral[3]	12,918	45.0	8,571	6,672	23.3	9,673	14,746	51.4	18,655
Public comprehensive	50,920	53.9	7,292	23,739	25.1	6,794	39,749	42.1	12,832
Private comprehensive	22,862	59.3	6,709	9,128	23.7	12,764	16,405	42.5	11,535
Private liberal arts	20,970	55.1	4,397	6,891	18.1	9,983	17,433	45.8	6,970
Public 2-year	65,751	59.8	6,486	16,871	15.3	7,367	41,474	37.7	12,453
Other[4]	13,502	51.5	7,334	5,382	20.5	7,789	11,881	45.4	10,860
1987									
All institutions[2,5]	269,455	52.3	8,313	135,920	26.4	7,827	225,082	43.7	12,263
Public research	47,275	46.4	11,386	36,217	35.5	8,112	49,268	48.3	9,199
Private research	20,476	49.3	23,386	15,147	36.4	12,523	23,796	57.2	18,048
Public doctoral[3]	26,861	47.8	9,472	15,404	27.4	7,065	24,777	44.1	18,123
Private doctoral[3]	8,216	32.8	7,395	7,102	28.3	14,082	11,421	45.6	26,977
Public comprehensive	53,124	54.7	5,577	26,411	27.2	6,637	40,244	41.4	7,628
Private comprehensive	22,190	60.2	5,075	8,213	22.3	8,645	15,034	40.8	17,612
Private liberal arts	18,563	48.3	3,849	6,372	16.6	5,170	14,964	38.9	5,576
Public 2-year	61,175	63.6	5,792	16,414	17.1	3,550	33,647	35.0	9,803
Other[4]	11,574	53.8	6,311	4,640	21.6	7,334	11,930	55.4	11,333

[1] Includes only those faculty with income from the source.

[2] All accredited, nonproprietary U.S. postsecondary institutions that grant a 2-year (A.A.) or higher degree and whose accreditation at the higher education level is recognized by the U.S. Department of Education.

[3] Includes institutions classified by the Carnegie Foundation as specialized medical schools.

[4] Public liberal arts, private 2-year, and religious and other specialized institutions, except medical.

[5] The Consumer Price Index for All Urban Consumers (CPI-U) was used to adjust 1987 dollars to constant 1992 dollars.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey" and 1988 National Survey of Postsecondary Faculty, "Faculty Survey."

Table 4.4—Income for full-time instructional faculty and staff in 4-year institutions with income beyond basic salary from institution, by source of income and program area: Fall 1987 and Fall 1992

Program area and year	Other income from institution			Consulting income			Other outside income		
	Number[1]	Percent of total	Mean	Number[1]	Percent of total	Mean	Number[1]	Percent of total	Mean
1992									
All program areas in 4-year institutions[2]	202,711	50.0	9,048	103,774	25.6	9,604	188,509	46.5	13,043
Agriculture/home economics	2,792	28.8	7,426	2,067	21.3	16,746	3,400	35.1	10,131
Business	18,309	63.4	8,487	9,695	33.6	14,914	11,874	41.1	18,664
Education	18,548	61.6	6,927	9,886	32.8	4,930	12,842	42.6	10,132
Engineering	11,397	55.9	13,287	8,232	40.4	11,670	7,648	37.5	11,409
Fine arts	12,894	48.0	4,823	7,635	28.4	8,867	17,228	64.1	8,591
Humanities	26,753	49.5	5,683	7,808	14.4	4,296	24,878	46.0	8,726
Natural sciences	39,298	49.3	7,915	18,632	23.4	8,026	30,682	38.5	11,153
Social sciences	26,275	54.7	8,406	13,071	27.2	13,125	24,914	51.9	8,941
All other fields	23,236	52.4	7,444	11,629	26.2	9,802	19,564	44.1	14,261
1987									
All program areas in 4-year institutions[2]	206,663	49.9	9,056	118,647	28.6	8,449	189,122	45.6	12,708
Agriculture/home economics	3,066	30.4	4,474	2,716	26.9	3,044	3,198	31.7	4,139
Business	19,883	69.5	8,497	12,773	44.6	15,008	11,358	39.7	9,343
Education	21,006	66.0	6,255	8,825	27.7	4,668	13,705	43.1	6,527
Engineering	11,327	54.4	9,925	9,980	48.0	9,768	6,889	33.1	11,707
Fine arts	14,130	51.1	3,891	7,266	26.3	4,875	16,544	59.9	5,883
Humanities	30,895	50.9	4,857	10,482	17.3	3,272	25,810	42.5	4,062
Natural sciences	37,770	50.5	8,482	18,321	24.5	7,877	27,968	37.4	8,614
Social sciences	27,176	57.6	6,241	14,389	30.5	8,618	22,688	48.1	13,134
All other fields	15,567	53.6	7,892	11,003	37.9	7,113	13,856	47.7	9,801

[1] Includes only those faculty with income from the source.

[2] Health sciences faculty are included in the program area total but are not shown separately. See Technical Notes for details.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey" and 1988 National Survey of Postsecondary Faculty, "Faculty Survey."

Table 4.5—Percentage distribution of full-time instructional faculty and staff, by satisfaction with salary and type and control of institution: Fall 1987 and Fall 1992

Type and control of institution and year	Full-time instructional faculty and staff	Satisfaction with salary	
		Dissatisfied[1]	Satisfied[2]
1992			
All institutions[3]	528,260	45.3	54.7
Public research	107,358	48.0	52.1
Private research	32,164	36.2	63.8
Public doctoral[4]	52,808	48.0	52.0
Private doctoral[4]	28,684	38.4	61.6
Public comprehensive	94,477	51.5	48.5
Private comprehensive	38,561	46.4	53.6
Private liberal arts	38,052	51.2	48.8
Public 2-year	109,957	38.6	61.4
Other[5]	26,200	42.6	57.4
1987			
All institutions[3]	515,138	41.5	58.5
Public research	102,115	40.4	59.6
Private research	41,574	41.0	59.0
Public doctoral[4]	56,294	45.8	54.2
Private doctoral[4]	25,065	39.4	60.6
Public comprehensive	97,131	43.3	56.7
Private comprehensive	36,842	50.9	49.1
Private liberal arts	38,446	44.8	55.2
Public 2-year	96,144	33.4	66.6
Other[5]	21,528	43.8	56.2

[1] Percentage who said "very dissatisfied" or "somewhat dissatisfied."

[2] Percentage who said "very satisfied" or "somewhat satisfied."

[3] All accredited, nonproprietary U.S. postsecondary institutions that grant a 2-year (A.A.) or higher degree and whose accreditation at the higher education level is recognized by the U.S. Department of Education.

[4] Includes institutions classified by the Carnegie Foundation as specialized medical schools.

[5] Public liberal arts, private 2-year, and religious and other specialized institutions, except medical.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey" and 1988 National Survey of Postsecondary Faculty, "Faculty Survey."

Table 4.6—Percentage distribution of full-time instructional faculty and staff in 4-year institutions, by satisfaction with salary and program area: Fall 1987 and Fall 1992

Program area and year	Full-time instructional faculty and staff	Satisfaction with salary	
		Dissatisfied[1]	Satisfied[2]
1992			
All program areas in 4-year institutions[3]	405,783	46.9	53.1
Agriculture/home economics	9,698	51.3	48.7
Business	28,895	47.2	52.8
Education	30,127	44.8	55.2
Engineering	20,381	38.1	61.9
Fine arts	26,874	56.9	43.1
Humanities	54,093	52.1	47.9
Natural sciences	79,663	43.6	56.4
Social sciences	48,030	49.2	50.8
All other fields	44,346	46.4	53.6
1987			
All program areas in 4-year institutions[3]	414,832	43.4	56.6
Agriculture/home economics	10,104	32.8	67.2
Business	28,630	45.7	54.3
Education	31,812	50.3	49.7
Engineering	20,915	36.5	63.5
Fine arts	27,628	55.1	44.9
Humanities	60,781	42.7	57.3
Natural sciences	74,852	42.5	57.5
Social sciences	47,324	45.6	54.4
All other fields	29,042	47.7	52.3

[1] Percentage who said "very dissatisfied" or "somewhat dissatisfied."

[2] Percentage who said "very satisfied" or "somewhat satisfied."

[3] Health sciences faculty are included in the program area total but are not shown separately. See Technical Notes for details.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey" and 1988 National Survey of Postsecondary Faculty, "Faculty Survey."

Table 4.7—Percentage distribution of full-time instructional faculty and staff, by satisfaction with benefits and type and control of institution: Fall 1987 and Fall 1992

Type and control of institution and year	Full-time instructional faculty and staff	Satisfaction with benefits	
		Dissatisfied[1]	Satisfied[2]
1992			
All institutions[3]	528,260	24.9	75.1
Public research	107,358	27.5	72.5
Private research	32,164	17.0	83.0
Public doctoral[4]	52,808	27.2	72.8
Private doctoral[4]	28,684	23.9	76.1
Public comprehensive	94,477	25.8	74.2
Private comprehensive	38,561	29.3	70.7
Private liberal arts	38,052	33.0	67.0
Public 2-year	109,957	18.6	81.4
Other[5]	26,200	26.2	73.8
1987			
All institutions[3]	515,138	23.2	76.8
Public research	102,115	22.8	77.2
Private research	41,574	19.8	80.2
Public doctoral[4]	56,294	26.8	73.2
Private doctoral[4]	25,065	20.3	79.8
Public comprehensive	97,131	23.0	77.0
Private comprehensive	36,842	33.9	66.1
Private liberal arts	38,446	26.8	73.2
Public 2-year	96,144	18.5	81.5
Other[5]	21,528	23.1	76.9

[1] Percentage who said "very dissatisfied" or "somewhat dissatisfied."

[2] Percentage who said "very satisfied" or "somewhat satisfied."

[3] All accredited, nonproprietary U.S. postsecondary institutions that grant a 2-year (A.A.) or higher degree and whose accreditation at the higher education level is recognized by the U.S. Department of Education.

[4] Includes institutions classified by the Carnegie Foundation as specialized medical schools.

[5] Public liberal arts, private 2-year, and religious and other specialized institutions, except medical.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey" and 1988 National Survey of Postsecondary Faculty, "Faculty Survey."

Table 4.8—Percentage distribution of full-time instructional faculty and staff in 4-year institutions, by satisfaction with benefits and program area: Fall 1987 and Fall 1992

Program area and year	Full-time instructional faculty and staff	Satisfaction with benefits	
		Dissatisfied[1]	Satisfied[2]
1992			
All program areas in 4-year institutions[3]	405,783	26.6	73.4
Agriculture/home economics	9,698	24.2	75.8
Business	28,895	28.2	71.8
Education	30,127	25.6	74.4
Engineering	20,381	27.2	72.9
Fine arts	26,874	30.0	70.1
Humanities	54,093	30.2	69.8
Natural sciences	79,663	25.8	74.2
Social sciences	48,030	28.2	71.8
All other fields	44,346	27.7	72.3
1987			
All program areas in 4-year institutions[3]	414,832	24.2	75.8
Agriculture/home economics	10,104	18.9	81.1
Business	28,630	26.4	73.6
Education	31,812	26.3	73.7
Engineering	20,915	19.6	80.4
Fine arts	27,628	25.4	74.6
Humanities	60,781	23.5	76.5
Natural sciences	74,852	24.1	75.9
Social sciences	47,324	25.9	74.1
All other fields	29,042	28.0	72.1

[1] Percentage who said "very dissatisfied" or "somewhat dissatisfied."

[2] Percentage who said "very satisfied" or "somewhat satisfied."

[3] Health sciences faculty are included in the program area total but are not shown separately. See Technical Notes for details.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey" and 1988 National Survey of Postsecondary Faculty, "Faculty Survey."

APPENDIX A

SUPPLEMENTARY TABLES

Table A-2.3—Number and percentage of part-time higher education instructional faculty and staff, by academic rank and type and control of institution: Fall 1987 and Fall 1992

Type and control of institution and year	Part-time instructional faculty and staff	Academic rank: Full professor	Associate professor	Assistant professor	Instructor or lecturer	Other ranks/ Not applicable
1992						
All institutions[1]	376,675	8.6	6.0	6.4	69.2	9.8
Public research	25,360	11.6	17.3	14.2	48.9	8.0
Private research	17,259	18.6	15.5	12.6	45.9	7.5
Public doctoral[2]	20,761	9.5	13.5	11.6	53.0	12.3
Private doctoral[2]	18,014	14.0	11.6	19.9	46.3	8.1
Public comprehensive	47,056	6.6	3.2	4.1	74.3	11.8
Private comprehensive	36,525	15.2	6.4	7.5	61.1	9.8
Private liberal arts	20,909	11.5	4.7	11.3	64.0	8.5
Public 2-year	166,335	4.1	2.4	2.4	81.6	9.4
Other[3]	24,454	15.1	7.0	5.8	60.1	12.0
1987						
All institutions[1]	254,687	6.4	4.4	9.0	67.2	13.1
Public research	17,219	14.8	10.8	15.9	51.1	7.4
Private research	11,546	13.1	8.5	21.3	47.0	10.1
Public doctoral[2]	11,383	8.2	3.4	29.4	56.4	2.7
Private doctoral[2]	14,728	6.6	10.7	25.0	53.6	4.1
Public comprehensive	33,211	3.9	3.3	10.0	74.3	8.5
Private comprehensive	23,615	8.5	8.1	11.9	64.7	6.8
Private liberal arts	16,945	6.3	5.4	6.1	66.3	16.0
Public 2-year	104,520	4.4	1.3	1.7	75.6	16.9
Other[3]	21,520	5.6	4.8	7.5	57.5	24.6

[1] All accredited, nonproprietary U.S. postsecondary institutions that grant a 2-year (A.A.) or higher degree and whose accreditation at the higher education level is recognized by the U.S. Department of Education.

[2] Includes institutions classified by the Carnegie Foundation as specialized medical schools.

[3] Public liberal arts, private 2-year, and religious and other specialized institutions, except medical.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey" and 1988 National Survey of Postsecondary Faculty, "Faculty Survey."

Table A-2.4—Number and percentage of part-time higher education instructional faculty and staff in 4-year institutions, by academic rank and program area: Fall 1987 and Fall 1992

Program area and year	Part-time instructional faculty and staff	Academic rank Full professor	Associate professor	Assistant professor	Instructor or lecturer	Other ranks/ Not applicable
1992						
All program areas in 4-year institutions*	199,046	12.2	9.1	9.9	59.0	9.8
Agriculture/home economics	1,317	—	24.3	—	66.2	9.5
Business	16,970	13.8	6.3	8.0	62.9	9.1
Education	20,733	8.5	5.1	6.8	66.4	13.3
Engineering	6,394	19.6	6.8	11.2	49.2	13.2
Fine arts	20,707	12.4	4.8	8.5	63.0	11.3
Humanities	29,206	7.7	4.4	5.8	74.0	8.2
Natural sciences	22,332	12.5	7.0	8.0	59.1	13.4
Social sciences	20,504	11.1	8.4	11.4	60.7	8.6
All other fields	30,895	21.4	6.7	5.7	56.7	9.6
1987						
All program areas in 4-year institutions*	148,011	7.8	6.6	14.0	61.1	10.5
Agriculture/home economics	1,919	11.0	16.4	2.1	57.6	13.0
Business	13,674	11.7	2.3	5.7	60.3	20.1
Education	8,953	5.9	6.4	8.4	66.2	13.2
Engineering	5,273	10.0	15.9	9.3	63.1	1.7
Fine arts	20,889	3.3	3.9	6.8	68.3	17.7
Humanities	21,091	4.3	3.8	7.1	74.0	10.8
Natural sciences	21,060	12.2	9.1	3.5	66.3	8.8
Social sciences	10,602	1.4	5.6	18.3	67.2	7.5
All other fields	16,999	12.9	2.2	11.4	68.2	5.3

— Too few cases for a reliable estimate.

* Health sciences faculty are included in the program area total but are not shown separately. See Technical Notes for details.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey" and 1988 National Survey of Postsecondary Faculty, "Faculty Survey."

Table A-2.5—Number and percentage of part-time higher education instructional faculty and staff, by tenure status and type and control of institution: Fall 1987 and Fall 1992

Type and control of institution and year	Part-time instructional faculty and staff	Tenure status: Tenured	On tenure track	Not on tenure track	No tenure system for faculty status	No tenure system at institution
1992						
All institutions[1]	376,675	2.9	1.5	46.5	44.0	5.1
Public research	25,360	9.6	2.9	55.2	32.2	0.2
Private research	17,259	2.4	0.7	52.1	40.6	4.3
Public doctoral[2]	20,761	5.5	1.6	54.7	38.1	0.1
Private doctoral[2]	18,014	3.9	2.1	49.3	40.6	4.2
Public comprehensive	47,056	2.6	1.6	51.3	43.5	1.0
Private comprehensive	36,525	1.9	1.1	46.1	46.1	4.9
Private liberal arts	20,909	3.5	1.8	51.1	38.3	5.4
Public 2-year	166,335	1.8	1.3	43.3	47.8	5.9
Other[3]	24,454	2.5	2.2	33.5	43.9	18.0
1987						
All institutions[1]	254,687	2.9	1.9	22.6	59.4	13.2
Public research	17,219	11.4	4.4	29.7	49.3	5.2
Private research	11,546	2.4	1.0	25.3	57.2	14.0
Public doctoral[2]	11,383	2.8	1.5	26.5	68.4	0.9
Private doctoral[2]	14,728	1.9	5.8	22.6	66.5	3.2
Public comprehensive	33,211	3.6	0.8	31.2	60.7	3.8
Private comprehensive	23,615	1.8	2.4	22.7	67.0	6.3
Private liberal arts	16,945	3.1	0.6	32.6	54.6	9.1
Public 2-year	104,520	2.0	1.6	18.9	63.6	14.0
Other[3]	21,520	0.8	1.6	10.8	32.7	54.0

[1] All accredited, nonproprietary U.S. postsecondary institutions that grant a 2-year (A.A.) or higher degree and whose accreditation at the higher education level is recognized by the U.S. Department of Education.

[2] Includes institutions classified by the Carnegie Foundation as specialized medical schools.

[3] Public liberal arts, private 2-year, and religious and other specialized institutions, except medical.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey" and 1988 National Survey of Postsecondary Faculty, "Faculty Survey."

Table A-2.6—Number and percentage of part-time higher education instructional faculty and staff in 4-year institutions, by tenure status and program area: Fall 1987 and Fall 1992

		Tenure status				
Program area and year	Part-time instructional faculty and staff	Tenured	On tenure track	Not on tenure track	No tenure system for faculty status	No tenure system at institution
1992						
All program areas in 4-year institutions*	199,046	3.7	1.7	49.7	41.0	4.0
Agriculture/home economics	1,317	17.1	—	58.8	24.1	—
Business	16,970	2.4	2.3	49.2	40.8	5.2
Education	20,733	3.3	1.2	48.7	44.5	2.4
Engineering	6,394	6.9	3.6	53.3	32.8	3.4
Fine arts	20,707	6.3	1.8	48.2	35.5	8.2
Humanities	29,206	2.4	0.4	46.9	47.6	2.8
Natural sciences	22,332	4.5	1.4	41.8	47.3	5.1
Social sciences	20,504	2.7	3.6	54.3	34.7	4.8
All other fields	30,895	2.5	1.5	50.6	42.6	2.9
1987						
All program areas in 4-year institutions*	148,011	3.5	2.2	25.6	56.8	12.0
Agriculture/home economics	1,919	8.9	—	62.2	17.1	11.9
Business	13,674	4.5	—	20.1	61.8	13.5
Education	8,953	5.2	1.4	40.0	45.1	8.3
Engineering	5,273	6.9	4.8	22.8	54.3	11.2
Fine arts	20,889	0.8	2.6	25.3	55.5	15.8
Humanities	21,091	5.3	0.1	29.0	61.5	4.0
Natural sciences	21,060	2.1	2.4	21.7	67.3	6.6
Social sciences	10,602	2.9	0.6	33.5	49.9	13.1
All other fields	16,999	2.6	0.7	17.8	63.3	15.6

— Too few cases for a reliable estimate.

* Health sciences faculty are included in the program area total but are not shown separately. See Technical Notes for details.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey" and 1988 National Survey of Postsecondary Faculty, "Faculty Survey."

Table A-2.7—Number and percentage of part-time higher education instructional faculty and staff with a doctoral or first professional degree, by type and control of institution: Fall 1987 and Fall 1992

Type and control of institution and year	Part-time instructional faculty and staff	Have doctoral or first professional degree	
		Yes	No
1992			
All institutions[1]	376,675	26.1	73.9
Public research	25,360	48.4	51.6
Private research	17,259	50.0	50.0
Public doctoral[2]	20,761	46.3	53.7
Private doctoral[2]	18,014	60.2	39.8
Public comprehensive	47,056	24.1	75.9
Private comprehensive	36,525	31.7	68.3
Private liberal arts	20,909	24.5	75.5
Public 2-year	166,335	12.7	87.3
Other[3]	24,454	32.3	67.7
1987			
All institutions[1]	254,687	29.4	70.6
Public research	17,219	51.4	48.6
Private research	11,546	69.8	30.2
Public doctoral[2]	11,383	47.4	52.6
Private doctoral[2]	14,728	53.6	46.5
Public comprehensive	33,211	33.6	66.4
Private comprehensive	23,615	24.6	75.4
Private liberal arts	16,945	31.1	68.9
Public 2-year	104,520	12.9	87.1
Other[3]	21,520	40.6	59.4

[1] All accredited, nonproprietary U.S. postsecondary institutions that grant a 2-year (A.A.) or higher degree and whose accreditation at the higher education level is recognized by the U.S. Department of Education.

[2] Includes institutions classified by the Carnegie Foundation as specialized medical schools.

[3] Public liberal arts, private 2-year, and religious and other specialized institutions, except medical.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey" and 1988 National Survey of Postsecondary Faculty, "Faculty Survey."

Table A-2.8—Number and percentage of part-time higher education instructional faculty and staff in 4-year institutions with a doctoral or first professional degree, by program area: Fall 1987 and Fall 1992

Program area and year	Part-time instructional faculty and staff	Have doctoral or first professional degree	
		Yes	No
1992			
All program areas in 4-year institutions*	199,046	37.7	62.3
Agriculture/home economics	1,317	13.0	87.0
Business	16,970	23.4	76.7
Education	20,733	32.0	68.1
Engineering	6,394	40.6	59.4
Fine arts	20,707	8.1	91.9
Humanities	29,206	28.1	71.9
Natural sciences	22,332	38.7	61.4
Social sciences	20,504	49.3	50.7
All other fields	30,895	44.2	55.8
1987			
All program areas in 4-year institutions*	148,011	41.2	58.8
Agriculture/home economics	1,919	31.2	68.8
Business	13,674	34.4	65.6
Education	8,953	31.5	68.5
Engineering	5,273	22.7	77.3
Fine arts	20,889	12.2	87.9
Humanities	21,091	30.9	69.1
Natural sciences	21,060	48.1	51.9
Social sciences	10,602	59.6	40.4
All other fields	16,999	39.6	60.4

* Health sciences faculty are included in the program area total but are not shown separately. See Technical Notes for details.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey" and 1988 National Survey of Postsecondary Faculty, "Faculty Survey."

Table A-2.9—Average age and age distribution of part-time instructional faculty and staff, by type and control of institution: Fall 1987 and Fall 1992

Type and control of institution and year	Part-time instructional faculty and staff	Average age	Age distribution					
			Under 35	35-44	45-54	55-64	65-70	71 or older
1992								
All institutions[1]	376,675	45.8	15.0	34.2	30.0	13.7	4.8	2.2
Public research	25,360	46.8	10.4	35.8	31.8	13.1	6.7	2.2
Private research	17,259	45.2	21.3	25.6	31.1	19.2	1.1	1.8
Public doctoral[2]	20,761	45.9	14.8	36.2	27.5	11.5	6.3	3.7
Private doctoral[2]	18,014	45.8	9.3	43.3	28.8	10.3	6.5	1.8
Public comprehensive	47,056	45.3	17.8	32.9	27.0	15.9	5.0	1.4
Private comprehensive	36,525	47.0	10.9	33.0	32.6	15.9	5.1	2.5
Private liberal arts	20,909	45.6	10.7	40.7	31.2	10.3	5.4	1.9
Public 2-year	166,335	45.5	16.0	34.0	30.2	13.7	4.3	1.9
Other[3]	24,454	46.9	16.6	30.5	30.1	11.1	6.0	5.6
1987								
All institutions[1]	254,687	44.3	15.9	41.6	25.9	11.7	3.3	1.6
Public research	17,219	46.2	17.4	32.4	25.1	16.0	7.0	2.1
Private research	11,546	45.3	15.2	32.8	37.7	8.6	3.6	2.1
Public doctoral[2]	11,383	41.6	23.0	45.8	17.6	9.0	3.6	1.0
Private doctoral[2]	14,728	44.4	9.3	46.8	33.7	8.1	0.5	1.8
Public comprehensive	33,211	43.4	16.9	43.1	25.3	11.2	1.0	2.5
Private comprehensive	23,615	44.8	20.0	34.0	26.5	12.8	4.0	2.8
Private liberal arts	16,945	46.7	12.8	38.6	24.4	14.6	5.0	4.6
Public 2-year	104,520	44.0	16.1	43.9	24.0	12.0	3.7	0.3
Other[3]	21,520	43.8	11.9	45.4	29.6	9.2	1.2	2.8

[1] All accredited, nonproprietary U.S. postsecondary institutions that grant a 2-year (A.A.) or higher degree and whose accreditation at the higher education level is recognized by the U.S. Department of Education.

[2] Includes institutions classified by the Carnegie Foundation as specialized medical schools.

[3] Public liberal arts, private 2-year, and religious and other specialized institutions, except medical.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey" and 1988 National Survey of Postsecondary Faculty, "Faculty Survey."

Table A-2.10—Average age and age distribution of part-time instructional faculty and staff in 4-year institutions, by program area: Fall 1987 and Fall 1992

Program area and year	Part-time instructional faculty and staff	Average age	Age distribution					
			Under 35	35-44	45-54	55-64	65-70	71 or older
1992								
All program areas in 4-year institutions*	199,046	46.0	14.1	35.0	29.7	14.0	4.9	2.4
Agriculture/home economics	1,317	45.5	19.7	41.6	7.3	26.7	—	4.8
Business	16,970	47.4	8.4	33.2	36.6	12.8	6.2	2.8
Education	20,733	50.0	3.9	32.2	32.3	20.3	8.1	3.2
Engineering	6,394	45.1	19.6	33.4	25.7	11.8	4.3	5.2
Fine arts	20,707	44.6	16.0	42.5	23.0	12.4	3.0	3.1
Humanities	29,206	45.5	19.1	27.0	33.8	13.7	3.3	3.2
Natural sciences	22,332	46.1	18.1	26.9	27.6	20.9	5.6	0.8
Social sciences	20,504	45.1	19.5	32.2	26.0	16.0	4.5	1.7
All other fields	30,895	44.8	11.7	40.7	31.9	12.0	2.5	1.3
1987								
All program areas in 4-year institutions*	148,011	44.5	15.7	40.1	27.4	11.3	3.0	2.5
Agriculture/home economics	1,919	46.8	0.6	34.7	48.4	10.0	6.4	—
Business	13,674	46.1	10.5	41.0	30.3	13.9	4.4	—
Education	8,953	46.9	5.3	45.2	22.4	21.4	5.2	0.6
Engineering	5,273	44.7	20.4	23.7	39.3	12.2	4.3	—
Fine arts	20,889	43.4	20.6	40.1	25.2	7.5	1.3	5.3
Humanities	21,091	44.7	19.4	35.4	27.2	10.1	2.8	5.1
Natural sciences	21,060	46.2	9.3	41.4	30.8	9.7	3.3	5.5
Social sciences	10,602	42.1	18.0	53.9	14.9	7.6	4.7	0.8
All other fields	16,999	43.6	19.9	36.4	27.0	13.3	3.0	0.5

— Too few cases for a reliable estimate.

* Health sciences faculty are included in the program area total but are not shown separately. See Technical Notes for details.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey" and 1988 National Survey of Postsecondary Faculty, "Faculty Survey."

Table A-2.11—Number and percentage of part-time higher education instructional faculty and staff, by sex and type and control of institution: Fall 1987 and Fall 1992

Type and control of institution and year	Part-time instructional faculty and staff	Sex	
		Male	Female
1992			
All institutions[1]	376,675	55.4	44.6
Public research	25,360	56.8	43.3
Private research	17,259	58.7	41.3
Public doctoral[2]	20,761	55.4	44.6
Private doctoral[2]	18,014	63.1	36.9
Public comprehensive	47,056	49.1	51.0
Private comprehensive	36,525	56.4	43.7
Private liberal arts	20,909	46.6	53.4
Public 2-year	166,335	56.6	43.4
Other[3]	24,454	56.1	44.0
1987			
All institutions[1]	254,687	57.6	42.4
Public research	17,219	66.3	33.7
Private research	11,546	56.9	43.1
Public doctoral[2]	11,383	39.2	60.8
Private doctoral[2]	14,728	70.2	29.8
Public comprehensive	33,211	50.0	50.0
Private comprehensive	23,615	60.6	39.4
Private liberal arts	16,945	37.0	63.0
Public 2-year	104,520	60.6	39.4
Other[3]	21,520	61.9	38.1

[1] All accredited, nonproprietary U.S. postsecondary institutions that grant a 2-year (A.A.) or higher degree and whose accreditation at the higher education level is recognized by the U.S. Department of Education.

[2] Includes institutions classified by the Carnegie Foundation as specialized medical schools.

[3] Public liberal arts, private 2-year, and religious and other specialized institutions, except medical.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey" and 1988 National Survey of Postsecondary Faculty, "Faculty Survey."

Table A-2.12—Number and percentage of part-time higher education instructional faculty and staff in 4-year institutions, by sex and program area: Fall 1987 and Fall 1992

Program area and year	Part-time instructional faculty and staff	Sex	
		Male	Female
1992			
All program areas in 4-year institutions*	199,046	55.0	45.0
Agriculture/home economics	1,317	42.8	57.2
Business	16,970	75.0	25.0
Education	20,733	35.6	64.4
Engineering	6,394	95.9	4.1
Fine arts	20,707	55.0	45.0
Humanities	29,206	40.8	59.2
Natural sciences	22,332	68.7	31.3
Social sciences	20,504	53.6	46.4
All other fields	30,895	56.8	43.2
1987			
All program areas in 4-year institutions*	148,011	55.8	44.2
Agriculture/home economics	1,919	49.9	50.1
Business	13,674	73.7	26.3
Education	8,953	38.4	61.6
Engineering	5,273	96.2	3.8
Fine arts	20,889	48.4	51.6
Humanities	21,091	43.5	56.5
Natural sciences	21,060	62.7	37.3
Social sciences	10,602	51.4	48.6
All other fields	16,999	59.9	40.1

* Health sciences faculty are included in the program area total but are not shown separately. See Technical Notes for details.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey" and 1988 National Survey of Postsecondary Faculty, "Faculty Survey."

Table A-2.13—Number and percentage of part-time higher education instructional faculty and staff, by race/ethnicity and type and control of institution: Fall 1987 and Fall 1992

Type and control of institution and year	Part-time instructional faculty and staff	Race/ethnicity				
		American Indian/ Alaskan Native	Asian/ Pacific Islander	Black, non-Hispanic	Hispanic	White, non-Hispanic
1992						
All institutions[1]	376,675	0.6	3.2	4.9	3.0	88.4
Public research	25,360	—	6.6	2.5	3.2	87.8
Private research	17,259	0.4	3.0	4.4	2.7	89.5
Public doctoral[2]	20,761	0.4	3.3	3.3	1.6	91.4
Private doctoral[2]	18,014	0.2	3.5	7.1	1.5	87.7
Public comprehensive	47,056	0.7	4.1	7.2	3.0	85.0
Private comprehensive	36,525	0.5	2.5	5.0	1.1	90.8
Private liberal arts	20,909	0.1	1.6	5.9	2.9	89.6
Public 2-year	166,335	0.8	2.7	4.6	4.0	87.9
Other[3]	24,454	1.1	3.8	3.2	1.1	90.8
1987						
All institutions[1]	254,687	1.0	3.1	3.2	2.2	90.6
Public research	17,219	1.0	1.1	0.4	—	97.6
Private research	11,546	1.1	2.6	9.4	1.7	85.3
Public doctoral[2]	11,383	0.7	—	0.7	1.3	97.3
Private doctoral[2]	14,728	0.7	11.6	—	4.9	82.9
Public comprehensive	33,211	2.5	6.0	2.1	1.1	88.3
Private comprehensive	23,615	—	3.1	0.7	1.9	94.4
Private liberal arts	16,945	1.1	0.1	11.6	3.2	84.0
Public 2-year	104,520	0.9	1.7	2.9	3.0	91.5
Other[3]	21,520	0.7	5.3	4.3	—	89.7

— Too few cases for a reliable estimate.

[1] All accredited, nonproprietary U.S. postsecondary institutions that grant a 2-year (A.A.) or higher degree and whose accreditation at the higher education level is recognized by the U.S. Department of Education.

[2] Includes institutions classified by the Carnegie Foundation as specialized medical schools.

[3] Public liberal arts, private 2-year, and religious and other specialized institutions, except medical.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey" and 1988 National Survey of Postsecondary Faculty, "Faculty Survey."

Table A-2.14—Number and percentage of part-time higher education instructional faculty and staff in 4-year institutions, by race/ethnicity and program area: Fall 1987 and Fall 1992

Program area and year	Part-time instructional faculty and staff	Race/ethnicity				
		American Indian/ Alaskan Native	Asian/ Pacific Islander	Black, non-Hispanic	Hispanic	White, non-Hispanic
1992						
All program areas in 4-year institutions*	199,046	0.4	3.6	5.2	2.3	88.6
Agriculture/home economics	1,317	—	—	—	2.4	97.6
Business	16,970	0.3	1.9	4.5	2.4	90.9
Education	20,733	1.0	1.0	7.0	1.2	89.9
Engineering	6,394	—	12.2	1.5	2.7	83.7
Fine arts	20,707	0.6	2.6	5.3	1.7	89.8
Humanities	29,206	0.1	2.6	4.1	4.7	88.5
Natural sciences	22,332	0.6	7.1	4.0	2.3	86.0
Social sciences	20,504	0.5	3.4	6.1	2.4	87.7
All other fields	30,895	0.2	2.4	5.7	1.6	90.1
1987						
All program areas in 4-year institutions*	148,011	1.0	4.0	3.3	1.6	90.0
Agriculture/home economics	1,919	—	—	—	—	100.0
Business	13,674	—	0.6	1.5	0.6	97.3
Education	8,953	1.4	0.7	4.0	1.5	92.4
Engineering	5,273	0.4	2.5	—	2.5	94.5
Fine arts	20,889	0.5	2.4	5.3	2.4	89.4
Humanities	21,091	0.8	1.9	1.7	2.2	93.4
Natural sciences	21,060	0.3	4.5	1.6	0.7	92.9
Social sciences	10,602	7.7	14.3	1.8	0.6	75.6
All other fields	16,999	0.5	1.2	1.4	1.1	95.9

— Too few cases for a reliable estimate.

* Health sciences faculty are included in the program area total but are not shown separately. See Technical Notes for details.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey" and 1988 National Survey of Postsecondary Faculty, "Faculty Survey."

Table A-2.15—Number and percentage of part-time higher education instructional faculty and staff, by U.S. citizenship status and type and control of institution: Fall 1987 and Fall 1992

Type and control of institution and year	Part-time instructional faculty and staff	Citizenship status	
		Citizen	Non-citizen
1992			
All institutions[1]	376,675	96.1	3.9
Public research	25,360	92.9	7.2
Private research	17,259	91.5	8.5
Public doctoral[2]	20,761	96.9	3.1
Private doctoral[2]	18,014	93.6	6.4
Public comprehensive	47,056	94.8	5.2
Private comprehensive	36,525	97.2	2.8
Private liberal arts	20,909	96.7	3.4
Public 2-year	166,335	97.4	2.6
Other[3]	24,454	95.8	4.2
1987			
All institutions[1]	254,687	97.1	2.9
Public research	17,219	96.0	4.0
Private research	11,546	93.6	6.4
Public doctoral[2]	11,383	98.9	1.1
Private doctoral[2]	14,728	92.4	7.6
Public comprehensive	33,211	96.3	3.7
Private comprehensive	23,615	97.4	2.7
Private liberal arts	16,945	99.2	0.8
Public 2-year	104,520	97.7	2.3
Other[3]	21,520	99.0	1.0

[1] All accredited, nonproprietary U.S. postsecondary institutions that grant a 2-year (A.A.) or higher degree and whose accreditation at the higher education level is recognized by the U.S. Department of Education.

[2] Includes institutions classified by the Carnegie Foundation as specialized medical schools.

[3] Public liberal arts, private 2-year, and religious and other specialized institutions, except medical.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey" and 1988 National Survey of Postsecondary Faculty, "Faculty Survey."

Table A-2.16—Number and percentage of part-time higher education instructional faculty and staff in 4-year institutions, by U.S. citizenship status and program area: Fall 1987 and Fall 1992

Program area and year	Part-time instructional faculty and staff	Citizenship status	
		Citizen	Non-citizen
1992			
All program areas in 4-year institutions*	199,046	95.1	4.9
Agriculture/home economics	1,317	100.0	0.0
Business	16,970	98.0	2.0
Education	20,733	98.7	1.3
Engineering	6,394	78.3	21.7
Fine arts	20,707	98.2	1.8
Humanities	29,206	92.3	7.7
Natural sciences	22,332	92.1	7.9
Social sciences	20,504	95.0	5.0
All other fields	30,895	96.2	3.8
1987			
All program areas in 4-year institutions*	148,011	96.7	3.3
Agriculture/home economics	1,919	100.0	—
Business	13,674	100.0	0.0
Education	8,953	97.6	2.4
Engineering	5,273	87.0	13.0
Fine arts	20,889	98.7	1.3
Humanities	21,091	94.4	5.6
Natural sciences	21,060	96.9	3.1
Social sciences	10,602	92.7	7.4
All other fields	16,999	99.4	0.6

— Too few cases for a reliable estimate.

*Health sciences faculty are included in the program area total but are not shown separately. See Technical Notes for details.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey" and 1988 National Survey of Postsecondary Faculty, "Faculty Survey."

Table A-3.1—Mean number of hours worked by part-time instructional faculty and staff, by type and control of institution: Fall 1987 and Fall 1992

Type and control of institution and year	Part-time instructional faculty and staff	Mean hours worked per week
1992		
All institutions[1]	376,675	33.8
Public research	25,360	38.9
Private research	17,259	40.3
Public doctoral[2]	20,761	34.6
Private doctoral[2]	18,014	37.0
Public comprehensive	47,056	34.7
Private comprehensive	36,525	35.6
Private liberal arts	20,909	33.4
Public 2-year	166,335	31.5
Other[3]	24,454	32.6
1987		
All institutions[1]	254,687	43.5
Public research	17,219	48.3
Private research	11,546	50.2
Public doctoral[2]	11,383	45.0
Private doctoral[2]	14,728	49.9
Public comprehensive	33,211	44.5
Private comprehensive	23,615	41.5
Private liberal arts	16,945	36.6
Public 2-year	104,520	41.2
Other[3]	21,520	48.6

[1] All accredited, nonproprietary U.S. postsecondary institutions that grant a 2-year (A.A.) or higher degree and whose accreditation at the higher education level is recognized by the U.S. Department of Education.

[2] Includes institutions classified by the Carnegie Foundation as specialized medical schools.

[3] Public liberal arts, private 2-year, and religious and other specialized institutions, except medical.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey" and 1988 National Survey of Postsecondary Faculty, "Faculty Survey."

Table A-3.2—Mean number of hours worked by part-time instructional faculty and staff in 4-year institutions, by program area: Fall 1987 and Fall 1992

Program area and year	Part-time instructional faculty and staff	Mean hours worked per week
1992		
All program areas in 4-year institutions*	199,046	35.9
Agriculture/home economics	1,317	39.9
Business	16,970	37.2
Education	20,733	32.4
Engineering	6,394	41.0
Fine arts	20,707	36.0
Humanities	29,206	31.8
Natural sciences	22,332	34.2
Social sciences	20,504	36.3
All other fields	30,895	41.2
1987		
All program areas in 4-year institutions*	148,011	45.3
Agriculture/home economics	1,919	41.5
Business	13,674	50.0
Education	8,953	39.3
Engineering	5,273	47.5
Fine arts	20,889	44.8
Humanities	21,091	40.5
Natural sciences	21,060	44.5
Social sciences	10,602	49.1
All other fields	16,999	48.2

* Health sciences faculty are included in the program area total but are not shown separately. See Technical Notes for details.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey" and 1988 National Survey of Postsecondary Faculty, "Faculty Survey."

Table A-3.3—Percentage distribution of part-time instructional faculty and staff, by time allocation and type and control of institution: Fall 1987 and Fall 1992

Type and control of institution and year	Part-time instructional faculty and staff	Percentage of time spent on			
		Teaching activities	Research activities	Administrative activities	Other activities
1992					
All institutions[1]	376,675	59.4	7.1	5.7	27.2
Public research	25,360	52.0	15.7	5.4	26.7
Private research	17,259	38.7	17.7	12.7	30.9
Public doctoral[2]	20,761	60.7	8.7	5.1	25.4
Private doctoral[2]	18,014	42.6	8.8	4.6	43.6
Public comprehensive	47,056	61.4	8.2	6.2	23.8
Private comprehensive	36,525	56.3	5.9	6.3	31.0
Private liberal arts	20,909	60.9	6.6	6.9	24.8
Public 2-year	166,335	64.5	4.3	5.0	25.6
Other[3]	24,454	58.8	7.0	5.1	28.3
1987					
All institutions[1]	254,687	57.5	5.5	3.8	33.2
Public research	17,219	46.1	11.2	7.4	35.4
Private research	11,546	38.9	12.2	6.8	42.1
Public doctoral[2]	11,383	48.2	9.1	3.8	38.9
Private doctoral[2]	14,728	43.0	10.1	4.2	42.8
Public comprehensive	33,211	60.7	6.8	4.2	28.4
Private comprehensive	23,615	53.1	5.5	4.5	37.0
Private liberal arts	16,945	62.9	6.6	2.5	28.0
Public 2-year	104,520	66.4	2.3	3.0	28.5
Other[3]	21,520	44.5	5.0	3.2	47.3

[1] All accredited, nonproprietary U.S. postsecondary institutions that grant a 2-year (A.A.) or higher degree and whose accreditation at the higher education level is recognized by the U.S. Department of Education.

[2] Includes institutions classified by the Carnegie Foundation as specialized medical schools.

[3] Public liberal arts, private 2-year, and religious and other specialized institutions, except medical.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey" and 1988 National Survey of Postsecondary Faculty, "Faculty Survey."

Table A-3.4—Percentage distribution of part-time instructional faculty and staff in 4-year institutions, by time allocation and program area: Fall 1987 and Fall 1992

Program area and year	Part-time instructional faculty and staff	Percentage of time spent on			
		Teaching activities	Research activities	Administrative activities	Other activities
1992					
All program areas in 4-year institutions*	199,046	55.1	9.5	6.4	28.6
Agriculture/home economics	1,317	54.5	3.4	8.8	33.3
Business	16,970	50.4	4.9	6.3	37.8
Education	20,733	64.3	5.1	13.0	16.8
Engineering	6,394	40.7	21.1	5.2	33.0
Fine arts	20,707	55.0	10.6	4.2	30.2
Humanities	29,206	69.9	9.3	4.0	16.6
Natural sciences	22,332	58.3	16.4	4.7	20.6
Social sciences	20,504	48.6	13.8	6.7	30.6
All other fields	30,895	45.2	7.5	6.8	39.6
1987					
All program areas in 4-year institutions*	148,011	51.1	7.8	4.4	36.7
Agriculture/home economics	1,919	57.0	11.4	3.0	28.7
Business	13,674	45.3	1.3	3.4	50.0
Education	8,953	70.5	3.5	6.6	19.4
Engineering	5,273	54.7	7.4	3.8	34.0
Fine arts	20,889	45.2	14.5	2.4	37.9
Humanities	21,091	71.8	6.2	3.7	18.4
Natural sciences	21,060	58.8	10.8	7.2	23.3
Social sciences	10,602	46.6	7.7	4.4	41.3
All other fields	16,999	42.7	4.5	1.8	51.0

* Health sciences faculty are included in the program area total but are not shown separately. See Technical Notes for details.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey" and 1988 National Survey of Postsecondary Faculty, "Faculty Survey."

Table A-3.5—Mean number of classroom hours and student contact hours of part-time instructional faculty and staff, by type and control of institution: Fall 1987 and Fall 1992

Type and control of institution and year	Part-time instructional faculty and staff	Mean classroom hours	Mean student contact hours[1]
1992			
All institutions[2]	376,675	7.0	170.4
Public research	25,360	7.2	231.3
Private research	17,259	4.0	85.9
Public doctoral[3]	20,761	6.3	211.1
Private doctoral[3]	18,014	5.6	156.3
Public comprehensive	47,056	6.6	192.7
Private comprehensive	36,525	7.0	148.8
Private liberal arts	20,909	6.4	117.7
Public 2-year	166,335	7.6	176.0
Other[4]	24,454	7.0	140.8
1987			
All institutions[2]	254,687	5.9	140.4
Public research	17,219	5.5	212.0
Private research	11,546	5.9	142.6
Public doctoral[3]	11,383	7.3	190.6
Private doctoral[3]	14,728	4.3	78.7
Public comprehensive	33,211	6.0	154.2
Private comprehensive	23,615	5.2	103.1
Private liberal arts	16,945	5.9	99.9
Public 2-year	104,520	6.1	139.0
Other[4]	21,520	7.0	156.2

[1] Number of hours per week spent teaching classes, multiplied by the number of students in those classes.

[2] All accredited, nonproprietary U.S. postsecondary institutions that grant a 2-year (A.A.) or higher degree and whose accreditation at the higher education level is recognized by the U.S. Department of Education.

[3] Includes institutions classified by the Carnegie Foundation as specialized medical schools.

[4] Public liberal arts, private 2-year, and religious and other specialized institutions, except medical.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey" and 1988 National Survey of Postsecondary Faculty, "Faculty Survey."

Table A-3.6—Mean number of classroom hours and student contact hours of part-time instructional faculty and staff in 4-year institutions, by program area: Fall 1987 and Fall 1992

Program area and year	Part-time instructional faculty and staff	Mean classroom hours	Mean student contact hours[1]
1992			
All program areas in 4-year institutions[2]	199,046	6.5	167.1
Agriculture/home economics	1,317	7.5	188.6
Business	16,970	7.0	164.0
Education	20,733	5.9	123.0
Engineering	6,394	6.5	197.9
Fine arts	20,707	6.4	123.3
Humanities	29,206	7.3	177.4
Natural sciences	22,332	5.9	160.9
Social sciences	20,504	5.7	172.7
All other fields	30,895	4.9	120.7
1987			
All program areas in 4-year institutions[2]	148,011	5.8	141.8
Agriculture/home economics	1,919	4.5	112.2
Business	13,674	5.9	157.2
Education	8,953	5.5	99.9
Engineering	5,273	4.6	125.2
Fine arts	20,889	6.8	122.8
Humanities	21,091	5.6	139.5
Natural sciences	21,060	4.8	142.9
Social sciences	10,602	5.2	175.3
All other fields	16,999	5.1	129.1

[1] Number of hours per week spent teaching classes, multiplied by the number of students in those classes.

[2] Health sciences faculty are included in the program area total but are not shown separately. See Technical Notes for details.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey" and 1988 National Survey of Postsecondary Faculty, "Faculty Survey."

Table A-3.7—Mean number of publications and presentations in the past two years by part-time instructional faculty and staff, by type and control of institution: Fall 1987 and Fall 1992

Type and control of institution and year	Part-time instructional faculty and staff	Refereed or juried publications	Reviews and non-refereed publications	Books and book chapters	Monographs and technical reports	Presentations and exhibits	Patents, copyrights, and software
1992							
All institutions[1]	376,675	0.5	1.0	0.2	1.0	4.1	0.2
Public research	25,360	1.1	2.3	0.3	0.5	5.4	0.1
Private research	17,259	1.0	2.2	0.3	3.0	4.5	0.0
Public doctoral[2]	20,761	0.7	1.0	0.2	0.9	5.3	0.2
Private doctoral[2]	18,014	1.1	0.9	0.3	0.7	3.8	0.0
Public comprehensive	47,056	0.3	0.9	0.1	1.0	6.1	0.1
Private comprehensive	36,525	0.5	1.3	0.1	1.8	5.7	0.2
Private liberal arts	20,909	0.5	1.3	0.2	0.6	5.3	0.2
Public 2-year	166,335	0.2	0.7	0.1	0.9	2.6	0.2
Other[3]	24,454	0.8	0.9	0.3	0.7	3.8	0.1
1987							
All institutions[1]	254,687	0.5	2.6	0.2	1.6	4.5	0.5
Public research	17,219	1.6	2.9	0.4	2.4	3.9	0.1
Private research	11,546	1.2	7.8	0.5	1.3	6.9	0.2
Public doctoral[2]	11,383	0.8	1.8	0.3	6.5	6.0	0.1
Private doctoral[2]	14,728	1.0	2.2	0.3	1.3	3.8	0.5
Public comprehensive	33,211	0.6	1.3	0.2	0.8	5.8	0.4
Private comprehensive	23,615	0.4	1.2	0.2	1.5	3.1	0.1
Private liberal arts	16,945	0.6	8.4	0.1	3.4	6.7	0.0
Public 2-year	104,520	0.2	1.4	0.2	1.0	3.6	0.2
Other[3]	21,520	0.4	5.3	0.1	1.8	5.6	3.8

[1] All accredited, nonproprietary U.S. postsecondary institutions that grant a 2-year (A.A.) or higher degree and whose accreditation at the higher education level is recognized by the U.S. Department of Education.

[2] Includes institutions classified by the Carnegie Foundation as specialized medical schools.

[3] Public liberal arts, private 2-year, and religious and other specialized institutions, except medical.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey" and 1988 National Survey of Postsecondary Faculty, "Faculty Survey."

Table A-3.8—Mean number of publications and presentations in the past two years by part-time instructional faculty and staff in 4-year institutions, by program area: Fall 1987 and Fall 1992

Program area and year	Part-time instructional faculty and staff	Refereed or juried publications	Reviews and non-refereed publications	Books and book chapters	Monographs and technical reports	Presentations and exhibits	Patents, copyrights, and software
1992							
All program areas in 4-year institutions*	199,046	0.7	1.3	0.2	1.2	5.2	0.1
Agriculture/home economics	1,317	0.2	0.1	—	0.3	1.3	—
Business	16,970	0.4	1.0	0.1	1.7	4.2	0.1
Education	20,733	0.4	1.4	0.1	0.8	4.1	0.1
Engineering	6,394	1.2	0.6	0.2	1.0	1.3	0.1
Fine arts	20,707	0.7	1.5	0.1	0.8	23.7	0.4
Humanities	29,206	0.8	1.4	0.3	0.4	2.0	0.1
Natural sciences	22,332	0.7	0.7	0.1	1.3	2.4	0.2
Social sciences	20,504	1.2	1.5	0.4	0.6	2.8	0.1
All other fields	30,895	0.7	2.6	0.3	2.1	3.9	0.1
1987							
All program areas in 4-year institutions*	148,011	0.8	3.5	0.3	2.1	5.2	0.8
Agriculture/home economics	1,919	0.7	4.8	1.0	0.0	1.2	—
Business	13,674	0.1	11.4	0.2	1.5	2.6	0.1
Education	8,953	0.2	1.3	0.5	1.0	3.7	0.5
Engineering	5,273	0.6	0.5	0.1	1.2	2.5	0.4
Fine arts	20,889	0.9	2.2	0.1	0.7	16.7	4.1
Humanities	21,091	0.9	3.1	0.3	0.9	2.3	0.1
Natural sciences	21,060	0.9	0.8	0.2	1.8	4.0	0.5
Social sciences	10,602	0.4	1.8	0.3	3.3	2.7	0.0
All other fields	16,999	0.5	10.4	0.2	5.9	3.2	0.1

— Too few cases for a reliable estimate.

* Health sciences faculty are included in the program area total but are not shown separately. See Technical Notes for details.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey" and 1988 National Survey of Postsecondary Faculty, "Faculty Survey."

Table A-3.9—Percentage distribution of part-time instructional faculty and staff, by satisfaction with work load and type and control of institution: Fall 1987 and Fall 1992

Type and control of institution and year	Part-time instructional faculty and staff	Satisfaction with work load		
		Dissatisfied[1]	Somewhat satisfied	Very satisfied
1992				
All institutions[2]	376,675	16.5	37.2	46.2
Public research	25,360	14.0	45.1	41.0
Private research	17,259	13.9	45.8	40.3
Public doctoral[3]	20,761	20.8	39.1	40.1
Private doctoral[3]	18,014	10.8	30.2	59.0
Public comprehensive	47,056	16.9	36.0	47.1
Private comprehensive	36,525	13.5	35.3	51.2
Private liberal arts	20,909	18.0	33.1	49.0
Public 2-year	166,335	18.3	37.1	44.6
Other[4]	24,454	12.1	36.6	51.3
1987				
All institutions[2]	254,687	14.1	30.2	55.7
Public research	17,219	11.3	30.2	58.5
Private research	11,546	6.4	34.9	58.7
Public doctoral[3]	11,383	10.2	38.8	51.1
Private doctoral[3]	14,728	11.1	32.0	56.9
Public comprehensive	33,211	16.0	36.3	47.8
Private comprehensive	23,615	12.2	25.8	62.0
Private liberal arts	16,945	11.2	25.9	62.9
Public 2-year	104,520	14.1	29.9	56.1
Other[4]	21,520	26.2	22.3	51.5

[1] Percentage who said "very dissatisfied" or "somewhat dissatisfied."

[2] All accredited, nonproprietary U.S. postsecondary institutions that grant a 2-year (A.A.) or higher degree and whose accreditation at the higher education level is recognized by the U.S. Department of Education.

[3] Includes institutions classified by the Carnegie Foundation as specialized medical schools.

[4] Public liberal arts, private 2-year, and religious and other specialized institutions, except medical.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey" and 1988 National Survey of Postsecondary Faculty, "Faculty Survey."

Table A-3.10—Percentage distribution of part-time instructional faculty and staff in 4-year institutions, by satisfaction with work load and program area: Fall 1987 and Fall 1992

Program area and year	Part-time instructional faculty and staff	Satisfaction with work load		
		Dissatisfied[1]	Somewhat satisfied	Very satisfied
1992				
All program areas in 4-year institutions[2]	199,046	15.2	37.3	47.5
Agriculture/home economics	1,317	27.1	14.9	58.0
Business	16,970	10.3	37.6	52.1
Education	20,733	12.0	22.7	65.3
Engineering	6,394	3.4	48.2	48.4
Fine arts	20,707	25.9	36.1	38.0
Humanities	29,206	22.2	39.6	38.2
Natural sciences	22,332	12.5	45.6	41.9
Social sciences	20,504	13.4	36.9	49.7
All other fields	30,895	10.0	36.9	53.1
1987				
All program areas in 4-year institutions[2]	148,011	14.3	30.4	55.3
Agriculture/home economics	1,919	12.5	48.8	38.8
Business	13,674	15.0	27.6	57.4
Education	8,953	7.6	25.3	67.1
Engineering	5,273	4.6	39.3	56.2
Fine arts	20,889	23.3	23.7	53.0
Humanities	21,091	17.6	27.6	54.7
Natural sciences	21,060	4.7	35.6	59.7
Social sciences	10,602	21.7	43.9	34.5
All other fields	16,999	16.9	25.0	58.1

[1] Percentage who said "very dissatisfied" or "somewhat dissatisfied."

[2] Health sciences faculty are included in the program area total but are not shown separately. See Technical Notes for details.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey" and 1988 National Survey of Postsecondary Faculty, "Faculty Survey."

Table A-3.11—Percentage distribution of part-time instructional faculty and staff, by perception of pressure to increase work load in recent years and type and control of institution: Fall 1992

Type and control of institution and year	Part-time instructional faculty and staff	Worsened	Stayed the same	Improved	Don't know
1992					
All institutions[1]	376,675	28.5	30.8	6.4	34.3
Public research	25,360	39.8	27.2	5.3	27.7
Private research	17,259	24.4	45.5	7.9	22.2
Public doctoral[2]	20,761	43.2	21.2	6.2	29.5
Private doctoral[2]	18,014	27.7	31.4	9.3	31.6
Public comprehensive	47,056	36.7	27.7	6.0	29.5
Private comprehensive	36,525	23.2	32.0	5.2	39.6
Private liberal arts	20,909	25.3	32.6	6.1	36.0
Public 2-year	166,335	25.2	31.5	6.1	37.3
Other[3]	24,454	24.8	30.7	9.1	35.5

[1] All accredited, nonproprietary U.S. postsecondary institutions that grant a 2-year (A.A.) or higher degree and whose accreditation at the higher education level is recognized by the U.S. Department of Education.

[2] Includes institutions classified by the Carnegie Foundation as specialized medical schools.

[3] Public liberal arts, private 2-year, and religious and other specialized institutions, except medical.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey."

Table A-3.12—Percentage distribution of part-time instructional faculty and staff in 4-year institutions, by perception of pressure to increase work load in recent years and program area: Fall 1992

Program area and year	Part-time instructional faculty and staff	Worsened	Stayed the same	Improved	Don't know
1992					
All program areas in 4-year institutions*	199,046	31.3	30.4	6.6	31.7
Agriculture/home economics	1,317	34.6	30.6	12.4	22.5
Business	16,970	23.3	37.3	6.3	33.2
Education	20,733	25.5	21.6	8.0	44.9
Engineering	6,394	26.2	34.7	2.9	36.3
Fine arts	20,707	31.0	38.7	5.6	24.7
Humanities	29,206	38.2	28.5	5.7	27.7
Natural sciences	22,332	34.8	27.6	6.8	30.8
Social sciences	20,504	32.7	26.0	8.9	32.4
All other fields	30,895	24.8	34.6	5.0	35.6

* Health sciences faculty are included in the program area total but are not shown separately. See Technical Notes for details.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey."

Table A-4.1—Mean income of part-time instructional faculty and staff, by source of income and type and control of institution: Fall 1987 and Fall 1992

Type and control of institution and year	Part-time instructional faculty and staff	Total earned income	Source of income: Basic salary from institution	Other income from institution	Outside consulting income	Other outside income
1992						
All institutions[1]	376,675	48,761	10,189	1,153	3,515	33,904
Public research	25,360	55,121	15,305	1,016	2,171	36,630
Private research	17,259	61,765	9,736	1,035	5,553	45,441
Public doctoral[2]	20,761	47,973	12,147	1,147	2,464	32,215
Private doctoral[2]	18,014	92,699	16,302	675	8,273	67,449
Public comprehensive	47,056	42,417	12,407	1,320	3,297	25,393
Private comprehensive	36,525	49,974	7,469	682	6,511	35,311
Private liberal arts	20,909	47,775	12,117	578	2,312	32,769
Public 2-year	166,335	41,148	8,178	969	2,510	29,492
Other[3]	24,454	64,316	10,866	3,862	4,668	44,920
1987						
All institutions[1]	254,687	42,276	7,783	569	3,610	30,314
Public research	17,219	48,918	15,131	906	2,023	30,858
Private research	11,546	76,777	11,577	424	2,695	62,082
Public doctoral[2]	11,383	42,288	9,998	665	4,671	26,954
Private doctoral[2]	14,728	71,684	11,111	790	13,054	46,730
Public comprehensive	33,211	36,993	8,087	620	5,963	22,323
Private comprehensive	23,615	47,502	6,477	717	5,013	35,295
Private liberal arts	16,945	31,516	7,608	578	1,176	22,154
Public 2-year	104,520	34,927	5,493	455	1,747	27,232
Other[3]	21,520	44,931	8,652	485	4,149	31,645

[1] All accredited, nonproprietary U.S. postsecondary institutions that grant a 2-year (A.A.) or higher degree and whose accreditation at the higher education level is recognized by the U.S. Department of Education.

[2] Includes institutions classified by the Carnegie Foundation as specialized medical schools.

[3] Public liberal arts, private 2-year, and religious and other specialized institutions, except medical.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey" and 1988 National Survey of Postsecondary Faculty, "Faculty Survey."

Table A-4.2—Mean income of part-time instructional faculty and staff in 4-year institutions, by source of income and program area: Fall 1987 and Fall 1992

Program area and year	Part-time instructional faculty and staff	Total earned income	Source of income			
			Basic salary from institution	Other income from institution	Outside consulting income	Other outside income
1992						
All program areas in 4-year institutions*	199,046	54,592	11,797	994	4,412	37,389
Agriculture/home economics	1,317	55,526	11,712	280	27,844	15,689
Business	16,970	67,343	8,744	833	9,466	48,300
Education	20,733	42,753	10,839	744	1,632	29,538
Engineering	6,394	75,692	15,934	1,948	9,920	47,891
Fine arts	20,707	42,005	10,822	1,146	3,404	26,634
Humanities	29,206	38,150	12,514	1,042	1,480	23,115
Natural sciences	22,332	46,655	13,689	972	2,408	29,587
Social sciences	20,504	49,905	9,498	1,149	2,452	36,807
All other fields	30,895	52,555	9,187	883	6,823	35,662
1987						
All program areas in 4-year institutions*	148,011	47,777	9,409	654	4,975	32,739
Agriculture/home economics	1,919	37,628	15,264	187	3,397	18,781
Business	13,674	61,911	7,607	209	7,885	46,211
Education	8,953	34,724	7,284	496	1,914	25,030
Engineering	5,273	57,082	10,607	498	11,017	34,960
Fine arts	20,889	27,817	8,072	556	5,025	14,165
Humanities	21,091	23,709	8,831	876	946	13,056
Natural sciences	21,060	44,537	8,787	794	2,110	32,846
Social sciences	10,602	46,472	8,973	846	5,243	31,410
All other fields	16,999	60,016	6,690	607	4,788	47,931

*Health sciences faculty are included in the program area total but are not shown separately. See Technical Notes for details.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey" and 1988 National Survey of Postsecondary Faculty, "Faculty Survey."

Table A-4.3—Income for part-time instructional faculty and staff with income beyond basic salary from institution, by source of income and type and control of institution: Fall 1987 and Fall 1992

Type and control of institution and year	Other income from institution			Consulting income			Other outside income		
	Number[1]	Percent of total	Mean	Number[1]	Percent of total	Mean	Number[1]	Percent of total	Mean
1992									
All institutions[2]	74,527	19.8	5,827	75,005	19.9	17,652	283,629	75.3	45,027
Public research	5,447	21.5	4,728	4,470	17.6	12,315	16,851	66.5	55,126
Private research	3,000	17.4	5,956	4,402	25.5	21,771	12,544	72.7	62,519
Public doctoral[3]	4,214	20.3	5,651	3,916	18.9	13,062	14,928	71.9	44,803
Private doctoral[3]	3,738	20.8	3,253	4,406	24.5	33,829	14,791	82.1	82,150
Public comprehensive	8,922	19.0	6,960	8,710	18.5	17,810	33,278	70.7	35,907
Private comprehensive	6,772	18.5	3,680	8,957	24.5	26,553	28,961	79.3	44,533
Private liberal arts	5,207	24.9	2,320	4,773	22.8	10,129	15,467	74.0	44,298
Public 2-year	32,626	19.6	4,938	30,517	18.4	13,679	128,097	77.0	38,296
Other[4]	4,602	18.8	20,526	4,855	19.9	23,513	18,713	76.5	58,702
1987									
All institutions[2]	48,928	19.2	2,960	56,075	22.0	16,379	196,742	77.32	39,204
Public research	3,228	18.8	4,833	3,850	22.4	9,047	12,823	74.47	41,439
Private research	1,789	15.5	2,736	2,702	23.4	11,514	9,285	80.42	77,200
Public doctoral[3]	2,495	22.2	3,002	3,714	33.0	14,162	7,611	67.59	39,877
Private doctoral[3]	3,755	25.5	3,098	5,899	40.1	32,590	12,233	83.06	56,262
Public comprehensive	5,311	16.0	3,876	9,669	29.1	20,483	24,921	75.04	29,748
Private comprehensive	4,466	19.0	3,774	5,580	23.8	21,107	18,930	80.58	43,804
Private liberal arts	5,277	31.1	1,855	4,166	24.6	4,783	12,861	75.90	29,188
Public 2-year	17,680	16.9	2,690	14,732	14.1	12,394	80,549	77.07	35,336
Other[4]	4,926	22.9	2,118	5,762	26.8	15,494	17,529	81.45	38,851

[1] Includes only those faculty with income from the source.

[2] All accredited, nonproprietary U.S. postsecondary institutions that grant a 2-year (A.A.) or higher degree and whose accreditation at the higher education level is recognized by the U.S. Department of Education.

[3] Includes institutions classified by the Carnegie Foundation as specialized medical schools.

[4] Public liberal arts, private 2-year, and religious and other specialized institutions, except medical.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey" and 1988 National Survey of Postsecondary Faculty, "Faculty Survey."

Table A-4.4—Income for part-time instructional faculty and staff in 4-year institutions with income beyond basic salary from institution, by source of income and program area: Fall 1987 and Fall 1992

Program area and year	Other income from institution			Consulting income			Other outside income		
	Number[1]	Percent of total	Mean	Number[1]	Percent of total	Mean	Number[1]	Percent of total	Mean
1992									
All program areas in 4-year institutions[2]	40,337	20.3	4,907	42,987	21.6	20,431	146,932	73.8	50,650
Agriculture/home economics	154	11.7	2,405	—	—	—	1,063	80.7	19,433
Business	3,133	18.5	4,513	4,305	25.4	37,313	12,068	71.1	67,919
Education	4,258	20.5	3,620	5,289	25.5	6,398	15,320	73.9	39,974
Engineering	1,727	27.0	7,211	1,327	20.8	47,798	3,414	53.4	89,691
Fine arts	5,361	25.9	4,426	5,851	28.3	12,045	17,157	82.9	32,146
Humanities	8,454	29.0	3,600	4,965	17.0	8,708	19,871	68.0	33,974
Natural sciences	3,898	17.5	5,568	3,225	14.4	16,674	15,340	68.7	43,072
Social sciences	3,901	19.0	6,037	3,920	19.1	12,822	15,609	76.1	48,348
All other fields	3,767	12.2	7,238	8,078	26.2	26,093	23,972	77.6	45,960
1987									
All program areas in 4-year institutions[2]	30,742	20.8	3,146	41,058	27.8	17,905	114,783	77.7	42,147
Agriculture/home economics	389	20.3	922	987	51.4	6,607	1,269	66.1	28,407
Business	1,231	9.0	2,318	5,235	38.3	20,595	12,242	89.5	51,616
Education	3,029	33.8	1,466	3,194	35.7	5,365	7,368	82.3	30,415
Engineering	674	13.1	3,807	1,539	29.9	36,862	3,495	67.9	51,516
Fine arts	5,846	28.0	1,986	7,393	35.4	14,197	17,483	83.7	16,924
Humanities	5,926	28.1	3,118	5,053	24.0	3,950	13,830	65.6	19,910
Natural sciences	4,938	23.5	3,385	4,359	20.7	10,195	15,525	73.7	44,555
Social sciences	1,140	10.8	7,863	3,727	35.2	14,914	8,012	75.6	41,562
All other fields	2,343	13.9	4,373	2,335	13.8	34,606	14,571	86.3	55,520

[1] Includes only those faculty with income from the source.

[2] Health sciences faculty are included in the program area total but are not shown separately. See Technical Notes for details.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey" and 1988 National Survey of Postsecondary Faculty, "Faculty Survey."

Table A-4.5—Percentage distribution of part-time instructional faculty and staff, by satisfaction with salary and type and control of institution: Fall 1987 and Fall 1992

Type and control of institution and year	Part-time instructional faculty and staff	Satisfaction with salary	
		Dissatisfied[1]	Satisfied[2]
1992			
All institutions[3]	376,675	45.5	54.5
Public research	25,360	47.6	52.5
Private research	17,259	38.1	61.9
Public doctoral[4]	20,761	50.6	49.4
Private doctoral[4]	18,014	44.5	55.6
Public comprehensive	47,056	52.8	47.2
Private comprehensive	36,525	48.3	51.7
Private liberal arts	20,909	47.8	52.2
Public 2-year	166,335	43.1	56.9
Other[5]	24,454	40.6	59.4
1987			
All institutions[3]	254,687	44.3	55.7
Public research	17,219	40.0	60.0
Private research	11,546	59.8	40.2
Public doctoral[4]	11,383	46.8	53.2
Private doctoral[4]	14,728	52.6	47.4
Public comprehensive	33,211	49.1	50.9
Private comprehensive	23,615	44.4	55.6
Private liberal arts	16,945	50.3	49.7
Public 2-year	104,520	37.2	62.8
Other[5]	21,520	55.2	44.8

[1] Percentage who said "very dissatisfied" or "somewhat dissatisfied."

[2] Percentage who said "very satisfied" or "somewhat satisfied."

[3] All accredited, nonproprietary U.S. postsecondary institutions that grant a 2-year (A.A.) or higher degree and whose accreditation at the higher education level is recognized by the U.S. Department of Education.

[4] Includes institutions classified by the Carnegie Foundation as specialized medical schools.

[5] Public liberal arts, private 2-year, and religious and other specialized institutions, except medical.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey" and 1988 National Survey of Postsecondary Faculty, "Faculty Survey."

Table A-4.6—Percentage distribution of part-time instructional faculty and staff in 4-year institutions, by satisfaction with salary and program area: Fall 1987 and Fall 1992

Program area and year	Part-time instructional faculty and staff	Satisfaction with salary	
		Dissatisfied[1]	Satisfied[2]
1992			
All program areas in 4-year institutions[3]	199,046	47.7	52.3
Agriculture/home economics	1,317	47.0	53.0
Business	16,970	38.3	61.7
Education	20,733	48.4	51.6
Engineering	6,394	48.4	51.6
Fine arts	20,707	56.3	43.7
Humanities	29,206	61.9	38.1
Natural sciences	22,332	44.7	55.3
Social sciences	20,504	44.2	55.9
All other fields	30,895	42.5	57.5
1987			
All program areas in 4-year institutions[3]	148,011	49.3	50.7
Agriculture/home economics	1,919	52.1	47.9
Business	13,674	43.4	56.6
Education	8,953	52.3	47.7
Engineering	5,273	24.9	75.1
Fine arts	20,889	50.6	49.4
Humanities	21,091	59.9	40.1
Natural sciences	21,060	37.2	62.8
Social sciences	10,602	54.8	45.2
All other fields	16,999	47.2	52.8

[1] Percentage who said "very dissatisfied" or "somewhat dissatisfied."

[2] Percentage who said "very satisfied" or "somewhat satisfied."

[3] Health sciences faculty are included in the program area total but are not shown separately. See Technical Notes for details.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey" and 1988 National Survey of Postsecondary Faculty, "Faculty Survey."

Table A-4.7—Percentage distribution of part-time instructional faculty and staff, by satisfaction with benefits and type and control of institution: Fall 1987 and Fall 1992

Type and control of institution and year	Part-time instructional faculty and staff	Satisfaction with benefits	
		Dissatisfied[1]	Satisfied[2]
1992			
All institutions[3]	376,675	57.4	42.6
Public research	25,360	42.8	57.2
Private research	17,259	69.2	30.8
Public doctoral[4]	20,761	50.1	49.9
Private doctoral[4]	18,014	53.5	46.5
Public comprehensive	47,056	55.6	44.4
Private comprehensive	36,525	59.5	40.5
Private liberal arts	20,909	58.1	41.9
Public 2-year	166,335	60.9	39.1
Other[5]	24,454	48.7	51.3
1987			
All institutions[3]	254,687	63.5	36.5
Public research	17,219	43.8	56.2
Private research	11,546	59.3	40.7
Public doctoral[4]	11,383	59.1	40.9
Private doctoral[4]	14,728	46.9	53.1
Public comprehensive	33,211	56.0	44.1
Private comprehensive	23,615	71.2	28.8
Private liberal arts	16,945	66.0	34.0
Public 2-year	104,520	70.3	29.7
Other[5]	21,520	68.2	31.8

[1] Percentage who said "very dissatisfied" or "somewhat dissatisfied."

[2] Percentage who said "very satisfied" or "somewhat satisfied."

[3] All accredited, nonproprietary U.S. postsecondary institutions that grant a 2-year (A.A.) or higher degree and whose accreditation at the higher education level is recognized by the U.S. Department of Education.

[4] Includes institutions classified by the Carnegie Foundation as specialized medical schools.

[5] Public liberal arts, private 2-year, and religious and other specialized institutions, except medical.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey" and 1988 National Survey of Postsecondary Faculty, "Faculty Survey."

Table A-4.8—Percentage distribution of part-time instructional faculty and staff in 4-year institutions, by satisfaction with benefits and program area: Fall 1987 and Fall 1992

Program area and year	Part-time instructional faculty and staff	Satisfaction with benefits	
		Dissatisfied[1]	Satisfied[2]
1992			
All program areas in 4-year institutions[3]	199,046	54.4	45.6
Agriculture/home economics	1,317	35.4	64.7
Business	16,970	54.4	45.6
Education	20,733	50.2	49.8
Engineering	6,394	39.6	60.4
Fine arts	20,707	67.8	32.2
Humanities	29,206	67.7	32.3
Natural sciences	22,332	52.4	47.6
Social sciences	20,504	48.7	51.3
All other fields	30,895	54.2	45.8
1987			
All program areas in 4-year institutions[3]	148,011	59.2	40.9
Agriculture/home economics	1,919	36.8	63.2
Business	13,674	57.4	42.6
Education	8,953	64.7	35.3
Engineering	5,273	58.1	41.9
Fine arts	20,889	75.0	25.0
Humanities	21,091	65.4	34.6
Natural sciences	21,060	57.6	42.4
Social sciences	10,602	48.1	51.9
All other fields	16,999	55.0	45.1

[1] Percentage who said "very dissatisfied" or "somewhat dissatisfied."

[2] Percentage who said "very satisfied" or "somewhat satisfied."

[3] Health sciences faculty are included in the program area total but are not shown separately. See Technical Notes for details.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey" and 1988 National Survey of Postsecondary Faculty, "Faculty Survey."

APPENDIX B

TECHNICAL NOTES

TECHNICAL NOTES

Overview

The 1992-93 National Study of Postsecondary Faculty (NSOPF-93) was sponsored by the U.S. Department of Education's National Center for Education Statistics (NCES). The study received additional support from the National Science Foundation (NSF) and the National Endowment for the Humanities (NEH). It was conducted by NORC, the National Opinion Research Center at the University of Chicago, under contract to NCES.

The first cycle of NSOPF was conducted in 1987-88 (NSOPF-88) with a sample of 480 institutions (including 2-year, 4-year, doctoral-granting, and other colleges and universities), over 3,000 department chairpersons, and over 11,000 faculty. The second cycle of NSOPF, conducted in 1992-93, was limited to surveys of institutions and faculty, but with a substantially expanded sample of 974 public and private nonproprietary higher education institutions and 31,354 faculty. The study was designed to provide a national profile of faculty: their professional backgrounds, responsibilities, workloads, salaries, benefits, and attitudes.

Institution Universe

The definition of the institution universe for NSOPF-93 was identical to the one used in NSOPF-88. It included institutions in the traditional sector of higher education: that is, institutions whose accreditation at the college level is recognized by the U.S. Department of Education, that provide formal instructional programs of at least two years' duration, that are public or private not-for-profit, and that are designed primarily for students who have completed the requirements for a high school diploma or its equivalent.

Faculty Universe

Unlike NSOPF-88, which was limited to faculty whose regular assignment included instruction, the faculty universe for NSOPF-93 was expanded to include all those who were designated as faculty, whether or not their responsibilities included instruction, and other (non-faculty) personnel with instructional responsibilities. Under this definition, researchers and administrators and other institutional staff who hold faculty positions, but who do not teach, were included in the sample. Instructional staff without faculty status also were included. In summary, the eligible universe was defined to include:

- full- and part-time personnel whose regular assignment included instruction;
- full- and part-time individuals with faculty status whose regular assignment did not include instruction;
- permanent and temporary personnel with any instructional duties, including adjunct, acting, or visiting status;
- faculty and instructional personnel on sabbatical leave.

Excluded from the NSOPF-93 universe of faculty were:

- faculty and other personnel with instructional duties outside the U.S. (but not on sabbatical leave);

- temporary replacements for faculty and other instructional personnel;

- faculty and other instructional and non-instructional personnel on leave without pay;

- graduate teaching assistants;

- military personnel who taught only ROTC courses;

- instructional personnel supplied by independent contractors.

Sample Design

A two-stage stratified clustered probability design was used to select the NSOPF-93 sample. The first-stage NSOPF-93 sampling frame consisted of the 3,256 postsecondary institutions that provided formal instructional programs of at least two years' duration and that were public or private, not-for-profit, drawn from the 1991-92 IPEDS (Integrated Postsecondary Education Data System[1]) Institutional Characteristics Survey. The sampling frame was sorted by type and control of institution to create groups of institutions called strata. The selection of institutions occurred independently within each stratum.

A modified Carnegie[2] classification system was used to stratify institutions according to cross-classification of control by type, first into 17 cells, and then into 15 strata. There were two levels of control, public and private, and nine types of institutions including:

1. Research universities (public or private): These institutions offer a full range of baccalaureate programs, are committed to graduate education through the doctorate, and give high priority to research. They award 50 or more doctoral degrees each year. There were 104 research institutions in the NSOPF-93 sampling frame;

2. Other Ph.D. (public or private): These institutions offer a full range of baccalaureate programs and are committed to graduate education through the doctorate. They award annually at least 10 doctoral degrees (in three or more disciplines), or 20 or more doctoral

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[1] IPEDS is a recurring set of surveys developed and maintained by NCES. Postsecondary education is defined by IPEDS as "the provision of a formal instructional program whose curriculum is designed primarily for students who have completed the requirements for a high school diploma or its equivalent." This definition includes programs whose purpose is academic, vocational and continuing professional education and excludes avocational and adult basic education. IPEDS encompasses all institutional providers of postsecondary education in the United States and its outlying areas. For more information on IPEDS data used in this study, see National Center for Education Statistics, *IPEDS Manual for Users* (Washington, D.C.: National Center for Education Statistics, 1991). This manual is also distributed with IPEDS data on CD-ROM.

[2] See *A Classification of Institutions of Higher Education,* (Princeton, N.J.: The Carnegie Foundation for the Advancement of Teaching), 1987. Out of the 3,256 institutions, 278 could not be classified. Carnegie staff supplied updates for 81 institutions; the remaining group of unclassified institutions were designated as "unknown" on the NSOPF-93 sampling frame.

degrees in one or more disciplines. There were 109 other Ph.D. institutions in the NSOPF-93 sampling frame;[3]

3. Comprehensive colleges and universities (public or private): These institutions offer a full range of baccalaureate programs and are committed to graduate education through the master's degree. They award 20 or more master's degrees annually in one or more disciplines. There were 578 comprehensive institutions in the NSOPF-93 sampling frame;

4. Liberal arts colleges (public or private): These institutions are primarily undergraduate colleges with major emphasis on baccalaureate degree programs. There were 578 liberal arts institutions in the NSOPF-93 sampling frame;

5. Two-year colleges (public or private): These institutions offer associate of arts certificate or degree programs and, with few exceptions, offer no baccalaureate degrees. There were 1,107 2-year institutions in the NSOPF-93 sampling frame;

6. Independent medical institutions (public or private): Those not considered as part of a 4-year college or university. There were 52 independent medical institutions in the NSOPF-93 sampling frame;

7. Religious colleges (private only): There were 309 religious institutions in the NSOPF-93 sampling frame;

8. Other (public/private): Includes a wide range of professional and other specialized degree-granting colleges and universities. There were 222 other specialized institutions in the NSOPF-93 sampling frame; and

9. Unknown (public/private): There were 197 institutions on the NSOPF-93 sampling frame that did not have a Carnegie classification.

First Stage Sampling

Since there are no public religious institutions, the cross-classification of control by type had 17 cells. However, the desired sampling rates for three of the cells—public research, private research, and public "other Ph.D."—were so close to 100 percent that it was appropriate to sample all of the institutions in those cells. Therefore, a single sampling stratum was constructed for these institutions, and all institutions were selected in that stratum (i.e., selected with certainty). Grouping these institutions together was appropriate from a sampling design and selection standpoint, although this stratum does not comprise a group of analytic interest.

Institutions in the 14 other strata[4] were referred to as "noncertainty" institutions. The stratum sample sizes, determined by a preliminary pass through the 14 strata, were allocated proportional to the total estimated number of faculty and instructional staff in each stratum. In those strata, the first stage selections were made using stratified sampling with probabilities within each stratum proportional to the expected numbers of faculty and instructional staff. Systematic probability proportional to size (PPS) sampling was used with measure of size (MOS) equal to 41 or the estimated number of faculty (and instructional staff), whichever was larger. MOS was defined as the total number of faculty and instructional staff as specified in the most recent IPEDS Fall Staff Survey available (1989-90). Of the 3,256 institutions listed on the sample frame, 3,106 had a MOS available. For the remaining 150 (4.6 percent) institutions for which faculty data were missing, MOS was imputed.

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[3] "Other Ph.D." institutions are included in the institutions noted as "Doctoral" in the body of the report.

[4] The "noncertainty" sampling strata were broken down as follows: private, other Ph.D.; public, comprehensive; private, comprehensive; public, liberal arts; private, liberal arts; public, medical; private, medical; private, religious (there are no public religious colleges); public, two-year; private, two-year; public, other; private, other; public, unknown; and private, unknown.

In systematic sampling, the order in which the institutions are listed on the frame is important, as it reflects an implicit stratification. Within each stratum the institutions were sorted by MOS in a "serpentine" manner, i.e., if one stratum was in ascending order by MOS, the next was descending, the one after that was ascending, and so on. This procedure helped to balance the sample with respect to institution size (based on number of faculty). A total of 789 institutions were initially selected and later supplemented with 185 institutions for a total of 974 selected in the first-stage.

Institutions were selected in two replicates. The first replicate "Pool 1" contained the initial sample of noncertainty and certainty institutions. The second replicate "Pool 2" was sorted into random order within strata and contained only noncertainty institutions. Institutions that were determined ineligible or could not be recruited after extensive follow-up were replaced at random by institutions within the same explicit stratum in Pool 2. Replacement institutions for the certainty stratum were selected at random from similar strata. ("Other Ph.D.," "Public Comprehensive," and "Private Comprehensive" sampling strata were used for this purpose.)

Second Stage Sampling

At the second stage of sample selection, the NSOPF-93 sampling frame consisted of lists of faculty and instructional staff obtained from 817 participating institutions. Each institution was randomly assigned a target total sample size, say *n*, of either 41 or 42 faculty to yield the desired average sample size of 41.5. Whenever an institution had fewer than 42 individuals, all faculty and instructional staff were selected. Otherwise, the following oversampling sizes[5] were used to select groups to ensure their adequate representation in the sample and to meet NSF and NEH analytic objectives: full-time females (3.36), blacks or Hispanics (5.60), Asians or Pacific Islanders (1.12), faculty in four NEH disciplines (2.24)—philosophy/religion, foreign languages, English language and literature, and history—and all others (0.00). All listed individuals who would qualify for more than one group were assigned to the group for which the oversampling rate (here defined as the oversample size divided by the number of individuals qualifying for the group) was largest. These five groups were used as strata for sampling faculty. The residual sample size (*n* minus the sum of the oversample sizes) was allocated across the five strata in proportion to the number of faculty in the strata. Then, the total sample in each stratum (consisting of the oversample size plus the proportionally allocated residual) was specified by simple random sampling without replacement, with the sampling independent from one faculty stratum to the next. For more details about second stage sampling, refer to the *1993 National Study of Postsecondary Faculty: Methodology Report* [NCES 97-467].

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[5] The oversample size for a group is the difference between the expected sample size for the group and the expected sample size that would have been attained if all faculty had been sampled at the same rate, i.e., in the absence of oversampling.

Data Collection and Response Rates

Prior to data collection, it was first necessary to obtain cooperation from the sampled institutions. Each institution was asked to provide annotated lists of all faculty and instructional staff according to the eligibility (and oversampling) criteria needed for second stage sampling. Between October 1992 and early March 1993, 26 institutions in the original sample were replaced by randomly selected comparable institutions (from Pool 2): 5 because they were ineligible and 21 because they were determined to be final refusals. After trying to gain cooperation from the initial sample of 789 institutions for almost six months, it was determined that a certain number of other institutions were unlikely to participate in the study. These institutions were identified in March 1993 and 159 additional institutions were randomly selected within the relevant strata (from Pool 2).

Project staff tried to gain cooperation from original and replacement (or supplemental) institutions simultaneously.[6] Of the 974 institutions in the total sample, 12 (1.2 percent) were found to be ineligible.[7] Ineligible institutions included those which had closed or which had merged with other institutions, satellite campuses that were not independent units, and institutions that did not grant any degrees or certificates. A total of 817 eligible institutions agreed to participate (i.e., to provide a list of faculty and instructional staff), for a list participation rate of 84.9 percent (83.4 percent, weighted).

Faculty data collection was conducted between January and December 1993, with a two-month hiatus during July and August while most faculty and instructional staff were on summer break. The faculty survey relied on a multi-modal data collection design which combined an initial mailed questionnaire with mail and telephone prompting supplemented by computer-assisted telephone interviewing (CATI). Questionnaire and follow-up mailings were sent out in large waves between January and July 1993 as the lists were received, sampled, and processed. Coordinators at the participating institutions who signed NCES's affidavit of nondisclosure and confidentiality also assisted in the effort by prompting nonrespondents to return their completed questionnaires to NORC. Of the 31,354 faculty and instructional staff sampled,[8] 1,590 (5.1 percent) were found to be ineligible, which included staff who were deceased or no longer at the institution, staff who did not have a Fall 1992 teaching assignment, and teaching assistants. A total of 25,780 questionnaires were completed for a response rate of 86.6 percent (84.4 percent, weighted). The overall faculty response rate (institution list participation rate × faculty questionnaire response rate) was 73.5 percent (70.4 percent, weighted).

Institution data collection was conducted between September 1993 and May 1994. The institution survey combined a mailed questionnaire with mail and telephone prompting directed at both participating (817 institutions which submitted faculty lists) and nonparticipating institutions (145 institutions), for an eligible sample of 962 institutions. For 385 (44 percent) of the self-administered questionnaires completed, the institutional coordinator who had provided the original list was the main respondent, although other institution staff usually contributed to the effort. A total of 872 institution questionnaires were completed for a response rate of 90.6 percent (93.5 percent, weighted).

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[6] Since the Pool 2 institutions were additional random selections into the sample, the effect of using Pool 2 institutions is no different than if a larger number of institutions had been selected initially and the pools had not been used at all. The response rates for Pool 1 institutions, and for Pool 1 and Pool 2 institutions combined, have the same expected value. Since it is based on a larger sample, the response rate for Pool 1 and Pool 2 combined is a more accurate estimator of the population response rate.

[7] When ineligible institutions were excluded from the sample, the sum of weights for eligible institutions was 3,188, rather than the 3,256 institutions specified in the sampling frame.

[8] Initially, 33,354 faculty were sampled. To reduce costs, 2,000 nonresponding faculty and instructional staff were randomly eliminated from the sample through subsampling in August 1993. A higher proportion of part-time faculty and instructional staff were eliminated than remained; this was taken into account in the calculation of faculty weights.

Best Estimates of Faculty

In comparing the weighted estimates based on the lists of faculty and instructional staff provided by institutions with those based on the institution questionnaires, several patterns emerged that were contrary to expected results. Although some variance in the estimates based on the lists and the institution questionnaires was expected, the magnitude of the difference was larger than anticipated. This, in and of itself, was not seen as a problem since the estimates were from two different sources. What was less plausible were the trends in the estimates of part-time faculty between NSOPF-88 and NSOPF-93. The institution survey showed a 5 percent increase in the estimate of part-time faculty between the fall of 1987 and the fall of 1992. The faculty survey, based on the lists of faculty and instructional staff provided by the institution, showed no change in the percentage of part-time faculty between the two points in time. The weighted estimates based on the lists also showed a 37.5 percent decrease in the number of health sciences faculty and instructional staff from the fall of 1987 to the fall of 1992. Institution recontact was necessary to resolve these discrepancies and to determine the "best estimates" of total, full- and part-time faculty and instructional staff.

The best estimates were derived following a reconciliation and verification recontact with a subset of institutions which had discrepancies of 10 percent or greater between the total number enumerated on the faculty list used for sampling and the total number reported on the institution questionnaire. The recontact effort also included 120 institutions identified by NCES as employing health sciences faculty.

Of the 760 "matched" institutions[9] (i.e., institutions which provided both a completed institution questionnaire and a list of faculty and instructional staff), 450 (59 percent) had a discrepancy of 10 percent or more between the questionnaire and the list, and 61 of the 450 had health sciences faculty.

Of the 817 institutions who provided lists of faculty and instructional staff, 509 institutions (450 with 10 percent or greater discrepancies plus an additional 59 institutions with health sciences faculty) were recontacted. Before recontacting each institution, each discrepancy was reviewed to eliminate obvious clerical or list posting errors. A best estimate was obtained for 492 (or 96.7 percent) of these institutions.

It is important to point out that 118 of the reconciled institutions were unable to provide a specific reason for the discrepancies. For the 374 that provided reasons, the most commonly cited reason was the omission of some part- or full-time faculty from the list provided for sampling faculty. This occurred for 107 institutions. Some institutions included certain types of medical faculty in one set of estimates, but not in the other. Downsizing affected faculty counts at several institutions. Another factor in the discrepancies was the time interval (in some instances a year or more) between the time the list of faculty and instructional staff was compiled and the time the institution questionnaire was completed. The list did not always include new hires for the fall term, which were counted in the institution questionnaire. Some institutions provided "full-time equivalents" (FTE's) on the institution questionnaire rather than the actual headcount of part-time staff that was requested. In some instances, however, where part-time faculty and instructional staff were overreported (on either the list or the questionnaire) the reason involved confusion between the pool of part-time or temporary staff employed by, or available to, the institution and the number actually employed during the fall semester.

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[9] A total of 929 of the 962 eligible institutions (96.6 percent) participated in the survey in some way — either by completing an institution questionnaire or by submitting a faculty list. A total of 872 institutions completed institution questionnaires and 817 institutions provided faculty lists. Of the 817 institutions which submitted faculty lists, 760 also completed an institution questionnaire. Therefore, "matched" data — counts of the total number of faculty at the institution drawn from the faculty list and from the institution questionnaire — are available for only these 760 institutions.

NORC used data gathered in the recontacting effort to adjust the original list of faculty and instructional staff to incorporate recontacted institutions' best estimates into the final estimates. The first step in this process used as its starting point the original list, which reported totals for full-, part-time, and total faculty and instructional staff for each of the 817 participating institutions. However, in some cases, institutions which supplied a total number did not supply a breakdown of the total number into full- and part-time components.[10] For these institutions, NORC used a two-step procedure of deriving best estimates: first, deriving "best total estimates" and, second, deriving "best full-time estimates." Best estimates for part-time staff were simply calculated by subtracting the number of full-time staff from the total number at each institution.

The next step in calculating best total estimates involved the substitution of the verified counts from the 492 institutions NORC recontacted. If an institution verified the counts from its original faculty list or was unable to confirm other estimates, the original list estimate was retained as the best estimate. If the institution verified the institution questionnaire data as a more accurate estimate, questionnaire data were substituted for original list data as the best estimate. If the institution provided a different set of estimates, the new estimates were substituted for counts based on original list data.

Institutions which were nonrespondents in the verification effort and which had discrepancies of 10 percent or greater between the estimates of faculty and instructional staff based on the lists provided by institutions and those based on the institution questionnaire were adjusted by multiplying the ratio of verified counts to original counts for the 492 recontacted institutions by the original list count. Original list data were used for the institutions which were not selected for recontact. For all 817 institutions, the source of the final best estimates was as follows:

460 (56.3 percent) used original list data;
280 (34.3 percent) used questionnaire data;
61 (7.5 percent) used new estimates (other than questionnaire or original list data); and
16 (1.9 percent) were ratio-adjusted.

During the reconciliation effort, some ineligible faculty and instructional staff were excluded from the institution-level totals. This happened if recontacted institutions reported that the original faculty list had included ineligible faculty. This information was supplied by 23 institutions. It is assumed that faculty population estimates derived from the best estimate calculations include only eligible faculty. For more discussion of the verification process and calculation of best estimates, see the *1993 National Study of Postsecondary Faculty: Methodology Report* [NCES 97-467].

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[10] Eighty-four of the 817 institutions did not specify the employment status (i.e., full- or part-time) of faculty and instructional staff on their original lists.

Weight Calculations

The weights for both the institution and faculty samples were designed to adjust for differential probabilities of selection and nonresponse. (For a detailed description of the weighting process, see the *1993 National Study of Postsecondary Faculty: Methodology Report)* [NCES 97-467]. Weights for the institution sample were constructed in three steps. First, the institution's base weight—equal to the reciprocal of its probability of selection into the sample—was calculated. (This step reflected the several steps used to select the institutions from sample Pool 1 and sample Pool 2.) Second, the base weights were adjusted for institutions that had merged and so were effectively listed multiple times in the sampling frame.[11] Finally, a nonresponse adjustment factor was applied to the weights to compensate for institution-level nonresponse. A review of the data indicated that post-stratification adjustment was not needed.

Weights for the faculty sample were computed in four steps. First, the base conditional selection probabilities were calculated; these reflected the selection rates for faculty members given that their institutions were sampled. In this step, the initial selection probabilities also were adjusted to reflect the exclusion of a random subsample of faculty. (See footnote 8.) Then the reciprocals of these selection probabilities were calculated to yield base conditional weights. Second, these weights were multiplied by the first-stage nonresponse-adjusted weights to yield second-stage sampling weights adjusted for institutional nonresponse. Third, a second-stage nonresponse adjustment factor was applied to these latter weights to compensate for nonresponse by faculty members. Fourth, the nonresponse-adjusted weights were poststratified to the best estimates of total, full-, and part-time faculty and instructional staff by sampling stratum.

The poststratification adjustment should reduce sampling variability, and more importantly reduce any reporting biases and bias due to undercoverage of the faculty sampling frame. Poststratification provides a means of weighting the faculty respondents to represent all faculty on the original faculty sampling frame as well as faculty missed on the frame. The method is entirely analogous to the nonresponse adjustment, where faculty respondents are weighted up to represent themselves as well as the faculty nonrespondents. While the nonresponse adjustment is based upon the assumption that the means of respondents and nonrespondents are similar, the poststratification adjustment is based upon the assumption that the means of covered faculty and missed faculty are similar. Neither assumption is perfect, but the resulting estimates are thought to be more accurate than they would be in the absence of the adjustments.

Imputation of Missing Data

Item nonresponse occurred when a respondent did not answer one or more survey questions. The item nonresponse rates were generally low for the institution and faculty questionnaires, since missing critical (and selected other) items were retrieved by interviewers. The NSOPF-93 faculty questionnaire had a mean item nonresponse rate of .103 for 395 items in six sections. The NSOPF-93 institution questionnaire had a mean item nonresponse rate of .101 for 283 items in four sections.[12] Imputation for item nonresponse was performed for each survey item, to make the study results more inclusive.[13] "Don't know" responses were treated as item nonresponse and imputed for both the institution and faculty questionnaires. However, a second imputation was done for selected items in the faculty questionnaire with "don't know" responses, where this caused 30 percent or more of the responses to be eligible for imputation. In the second imputation, "don't knows" were treated as legitimate responses, and only in a case where there was no response to a survey item was imputation performed. For these items, in the second imputation, missing responses were imputed across all response categories, including the don't know category. This was done to allow researchers to choose how to treat don't knows in their analyses. Not applicable ("NA") responses were not imputed since these represented respondents who were not eligible to answer the relevant item.

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[11] After the sample was selected and institutions were contacted, NORC discovered that a few of the institutions in the sample had merged with other institutions on the sampling frame. Since a merged institution would be in the sample if any listing of the institution was selected from the frame, its weight must be reduced accordingly.

Imputation was performed using several procedures. Missing gender, race, and employment status data on the faculty data file were imputed directly from information supplied by institutions on the lists used for sampling faculty and instructional staff, whenever this information was available.

Two statistical procedures, regression-based and hot-deck, were employed to impute other missing data on both data files. Regression-based imputation was used for continuous and dichotomous variables. Hot-deck imputation was used for all other variables. The type of imputation used was recorded by setting the appropriate value of the imputation flag for each survey item.

Sources of Error

The survey estimates provided in the NSOPF-93 analytical reports, published by NCES, are subject to two sources of error: sampling errors and nonsampling errors. Sampling errors occur because the estimates are based on a sample of individuals in the population rather than on the entire population. Sampling errors can be quantified using statistical procedures in which a variance estimate is calculated. In the reports, the variance estimate is a standard error for the mean or proportion (including percent). The standard error measures the variability of the sample estimator in repeated sampling, using the same sample design and sample size. It indicates the variability of a sample estimator that would be obtained from all possible samples of a given design and size. Standard errors are used as a measure of the precision expected from a particular sample. If all possible samples were surveyed under similar conditions, intervals of 1.96 standard errors below to 1.96 standard errors above a mean or proportion would include the true population parameter in about 95 percent of the samples. In general, for large sample sizes (*n* greater than or equal to 30) and for estimates of the mean or the proportion, the intervals described above provide a 95 percent confidence interval. If sample sizes are too small, or if the parameters being estimated are not means or proportions, then these intervals may not correspond to the 95 percent confidence level.

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[12] The item nonresponse rate is defined as the ratio of the total number of nonresponses to the total number of individuals eligible to respond to a questionnaire item. The mean item nonresponse rates reported here are the unweighted means of the item nonresponse rates for all items on the questionnaires. For a full description of item nonresponse, see the *1993 National Study of Postsecondary Faculty: Methodology Report* [NCES 97-467].

[13] For more information on imputation of missing data in sample surveys, see Kalton, Graham and Daniel Kasprzyk, "Imputing for Missing Survey Responses." Paper presented at 1982 Proceedings of the Section on Survey Research Methods, American Statistical Association; Kalton, Graham and Daniel Kasprzyk, "The Treatment of Missing Survey Data," *Survey Methodology 12 (1)* (June 1986), pp. 1-16.

The standard errors may be used to calculate confidence intervals around each estimate and to compare two or more estimates to determine if the observed differences are statistically significant. For example, Table 3.1 in this report shows that full-time instructional faculty and staff reported that they worked an estimated average of 52.5 hours per week in the fall term of 1992. The standard error of that estimate is .21 hours (Table T3.1). The 95 percent confidence interval for the statistic extends from 52.1 [52.5 - (1.96 × .21)] to 52.9 [52.5 + (1.96 × .21)] or from 52.1 to 52.9 hours per week. Standard errors for all estimates presented in this report's tables were computed using a technique known as Taylor series approximation. A computer program, SUDAAN,[14] was used to calculate the standard errors. Those opting to calculate variances with the Taylor-series approximation method should use a "with replacement" type variance formula. Specialized computer programs, such as SUDAAN and CENVAR[15] calculate variances with the Taylor-series approximation method.

Comparisons noted in this report are significant at the .05 level. The significance of the difference between the overall mean (i.e., the mean of the entire population) and a subgroup mean (e.g., between the mean salary of all faculty in all institutions and the mean salary of all faculty in public doctoral institutions) was tested using a t-test in which the standard error of the difference was adjusted for the covariance between the subgroup and the total group. The exact formula for the appropriate t-test is:

$$t = \frac{\overline{X_S} - \overline{X_T}}{\sqrt{se_S^2 + se_T^2 - 2(p)se_S^2}}$$

where $\overline{X_T}$ and se_T are the mean and standard error for the total group, $\overline{X_S}$ and se_S are the mean and standard error for the subgroup, and p is the proportion of the total group contained in the subgroup.

When multiple pairwise comparisons were made, the acceptable minimum significance level was decreased by means of the Bonferroni adjustment.[16] This adjustment takes into account the increased likelihood, when making multiple comparisons, of finding significant pairwise differences simply by chance. With this adjustment, the significance level being used for each comparison (.05) is divided by the total number of comparisons being made.

Sample estimates also are subject to bias from nonsampling errors. It is more difficult to measure the magnitude of these errors. They can arise for a variety of reasons: nonresponse, undercoverage, differences in the respondent's interpretation of the meaning of questions, memory effects, misrecording of responses, incorrect editing, coding, and data entry, time effects, or errors in data processing. For example, undercoverage (in which institutions did not provide a complete enumeration of eligible faculty) and listing of ineligible faculty necessitated the "best estimates" correction to the NSOPF-93 faculty population estimates. For a more detailed discussion of the undercoverage problem, refer to the *1993 National Study of Postsecondary Faculty: Methodology Report* [NCES 97-467]. Whereas general sampling theory can be used, in part, to determine how to estimate the sampling variability of a statistic, nonsampling errors are not easy to measure. Measurement of nonsampling errors usually requires the incorporation of a methodological experiment into the survey or the use of external data to assess and verify survey results.

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[14] Shah, Babubhai V., Beth G. Barnwell, and Gayle S. Bieler. *SUDAAN User's Manual Release 6.4.* (Research Triangle Park, N.C.: Research Triangle Institute), 1995.

[15] U.S. Bureau of the Census. *CENVAR IMPS Version 3.1* (Washington D.C.: U.S. Bureau of the Census), 1995.

[16] For an explanation of the Bonferroni adjustment for multiple comparisons, see Miller, Rupert G., *Simultaneous Statistical Inference* (New York: McGraw Hill Co.), 1981 or Dunn, Olive Jean. "Multiple Comparisons Among Means," *Journal of the American Statistical Association 56 (293).* (March 1961) pp. 52-64.

To minimize the potential for nonsampling errors, the faculty and institution questionnaires (as well as the sample design, data collection, and data processing procedures) were field-tested with a national probability sample of 136 postsecondary institutions and 636 faculty members in 1992. To evaluate reliability, a subsample of faculty respondents were re-interviewed. An extensive item nonresponse analysis of the questionnaires also was conducted followed by additional evaluation of the instruments and survey procedures.[17] An item nonresponse analysis also was conducted for the full-scale surveys. See the *1993 National Study of Postsecondary Faculty: Methodology Report* [NCES 97-467] for a detailed description of the item nonresponse analysis.

In addition, for the full-scale surveys, a computer-based editing system was used to check data for range errors, logical inconsistencies, and erroneous skip patterns. For erroneous skip patterns, values were logically assigned on the basis of the presence or absence of responses within the skip pattern whenever feasible, given the responses. Missing or inconsistent critical items were retrieved. Some small inconsistencies between different data elements remained in the data files. In these situations, it was impossible to resolve the ambiguity as reported by the respondent. All data were keyed with 100 percent verification of a randomly selected subsample of 10 percent of all questionnaires received.

Replicate Weights

Thirty-two replicate weights are provided on the data files for users who prefer another method of variance estimation. These weights implement the balanced half-sample (BHS) method of variance estimation,[18] and they have been created to handle the certainty stratum and to incorporate finite population correction factors for each of the 14 noncertainty strata. Two widely available software packages, WesVarPC®,[19] and PC CARP,[20] have capabilities to use replicate weights to estimate variances.

Analysts should be cautious about use of BHS-estimated variances that relate to one stratum or to a group of two or three strata. Such variance estimates may be based upon far fewer than 32 replicates, and thus the variance of the variance estimator may be large.

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[17] A complete description of the field test design and results can be found in Abraham, Sameer Y., *et al.*, *1992-93 National Study of Postsecondary Faculty: Field Test Report* (Washington, D.C.: U.S. Department of Education, National Center for Education Statistics [NCES:93-390]), February 1994.

[18] For a discussion of the balanced half-sample (BHS) method of variance estimation, see Wolter, Kirk M., *Introduction to Variance Estimation* (New York: Springer-Verlag), 1985, pp. 110-152.

[19] Westat, Inc., *A User's Guide to WesVarPC®, Version 2.0* (Rockville, Md.: Westat, Inc.), 1996.

[20] Fuller, Wayne C., *et al., PC CARP IV*. (Ames, Iowa: Statistical Laboratory, Iowa State University), 1986.

A Note About Estimates Based Upon Small Samples

Analysts who use either the restricted use faculty file or the institution file should also be cautious about cross-classifying data so deeply that the resulting estimates are based upon a very small number of observations. Analysts should interpret the accuracy of NSOPF-93 statistics in light of estimated standard errors and of the number of observations used in the statistics.

Comparability of NSOPF-88 and NSOPF-93 Faculty Questionnaire Data

In this report, the entire sample of 1988 faculty is compared with a subset of the 1993 faculty who responded "yes" to Question 1, and then said in Question 1a that "all" or "some of your instructional duties related to credit courses or advising or supervising academic activities for credit." These questions are almost identical to the first two questions on the NSOPF-88 faculty questionnaire. This definition of instructional faculty selects approximately 90 percent of the NSOPF-93 sample for analysis. The proportion of total faculty instructional faculty represent is consistent with that reported on the institutional questionnaire (see Table 2.3 of *Institutional Policies and Practices* [NCES 97-080]).

A look at the distribution of faculty across institution types (discussed in the introduction to this report) indicates that the selection criteria described above yield comparable faculty population estimates. A comparison of the percentage distribution of all instructional faculty and staff, full-time instructional faculty and staff and part-time instructional faculty and staff between NSOPF-88 and NSOPF-93 reveals that percentage distribution in each year is quite similar, although a larger proportion of faculty in two-year schools in 1993 is observed. In addition, data reported on NSOPF-93 are consistent with data reported on surveys conducted by the American Association of University Professors and by NCES's Integrated Postsecondary Education Data System.

However, comparisons between NSOPF-88 and NSOPF-93 should be made cautiously. The respondents who received questionnaires in the two rounds were very different. For NSOPF-88, instructions to institutions that supplied faculty lists used for sampling asked that only the names of instructional faculty be supplied. For NSOPF-93, a listing of all faculty was requested. Thus, for NSOPF-88, each institution was allowed to make its own decision about which faculty members belonged in the sample, thereby creating a situation that does not allow researchers to precisely match the *de facto* sample definition used by institutions in NSOPF-88.

Program Areas

Throughout this report, fields in which faculty teach are grouped into 10 categories. These are described below:

Agriculture and home economics: includes agribusiness, agricultural sciences, renewable resources, other agriculture, and home economics.

Business: includes business, accounting, banking and finance, business administration and management, business administrative support, human resources development, organizational behavior, marketing and distribution, and other business.

Education: includes general education, basic skills, bilingual and cross-cultural education, curriculum and instruction, education administration, education evaluation and research, educational psychology, special education, student counseling and personnel, other education, teacher education-unspecified, pre-elementary, elementary, secondary, adult and continuing, other general teacher ed. programs, and teacher education in specific subjects.

Engineering: includes general, civil, electrical, mechanical, chemical, and other engineering; and engineering-related technologies.

Fine arts: includes art history and appreciation, crafts, dance, design, dramatic arts, film arts, fine arts, music, music history and appreciation, and other visual or performing arts.

Health sciences: includes health sciences-unspecified, allied health technologies, dentistry, health services administration, medicine, nursing, pharmacy, public health, veterinary medicine, and other health sciences.

Humanities: includes general English, composition, American literature, English literature, linguistics, speech, English as second language, other English, foreign languages, philosophy, religion, and history.

Natural sciences: includes computer science-unspecified, computer and information sciences, computer programming, data processing, systems analysis, biochemistry, biology, botany, genetics, immunology, microbiology, physiology, zoology, physical sciences-unspecified, astronomy, chemistry, physics, geological sciences, mathematics, and statistics.

Social sciences: includes psychology, social sciences-unspecified, general social sciences, anthropology, archeology, area and ethnic studies, demography, economics, geography international relations, political science, sociology, and other social sciences.

Other: includes architecture, communications, industrial arts, law, library and archival sciences, military studies, multi-interdisciplinary studies, parks and recreation, theology, protective services, public affairs, science technologies, vocational training (i.e., construction trades, consumer services, mechanics and repairers, precision production, and transportation), and fields coded as "other."

Estimates for the category of health sciences are not shown separately, but included in the totals. This is explained below.

A Special Note About Estimates of Health Sciences Faculty

Problems with estimates of health sciences faculty could only be partly rectified by the creation of new best estimates. The reconciliation effort helped to identify some institutions that failed to list health science faculty on their original faculty lists. However, because faculty list data recorded faculty members' disciplines only for faculty in the four NEH disciplines, it was impossible to poststratify to best estimates for health science faculty.

Health science faculty are more likely to perform individualized instruction or noncredit teaching activities than are other types of faculty participating in NSOPF-93. The largest concentration of faculty who conducted individualized instruction but who did not teach courses, was found in the health sciences. Of the estimated 76,200 faculty who conducted individualized instruction and taught no other course, 31,201, or 41 percent, of the total were health sciences faculty. The next largest group of faculty meeting these criteria were found in the natural sciences (8,805 or 11.6 percent). Because of the importance of individualized instruction to health sciences faculty, selecting for analysis only those faculty who had any for-credit instructional responsibilities may have the unintended consequence of excluding a greater number of health sciences faculty than is warranted.

Because differences between health science faculty and other types of faculty persist despite reconciliation, health sciences faculty were included only in the totals in this report. In the *1993 National Study of Postsecondary Faculty: Methodology Report* [NCES 97-467], the problem with health science estimates is discussed further and recommendations are made for future rounds of NSOPF.

APPENDIX C

STANDARD ERROR TABLES

Table T2.1—Standard errors of number and percentage of higher education instructional faculty and staff, by employment status and type and control of institution: Fall 1987 and Fall 1992

Type and control of institution and year	Instructional faculty and staff	Employment status	
		Full-time	Part-time
1992			
All institutions[1]	20,399.96	0.94	0.94
Public research	14,179.28	1.72	1.72
Private research	10,520.82	6.41	6.41
Public doctoral[2]	7,380.00	2.89	2.89
Private doctoral[2]	6,340.63	3.72	3.72
Public comprehensive	6,475.32	2.33	2.33
Private comprehensive	4,249.69	3.45	3.45
Private liberal arts	3,955.64	2.92	2.92
Public 2-year	12,192.90	1.28	1.28
Other[3]	3,617.62	3.84	3.84
1987			
All institutions[1]	20,725.28	1.19	1.19
Public research	8,773.84	2.13	2.13
Private research	5,536.52	4.09	4.09
Public doctoral[2]	5,192.55	1.68	1.68
Private doctoral[2]	8,251.81	6.36	6.36
Public comprehensive	9,196.03	2.33	2.33
Private comprehensive	3,948.92	3.63	3.63
Private liberal arts	4,947.11	4.59	4.59
Public 2-year	11,375.99	2.25	2.25
Other[3]	4,512.67	5.09	5.09

[1] All accredited, nonproprietary U.S. postsecondary institutions that grant a 2-year (A.A.) or higher degree and whose accreditation at the higher education level is recognized by the U.S. Department of Education.

[2] Includes institutions classified by the Carnegie Foundation as specialized medical schools.

[3] Public liberal arts, private 2-year, and religious and other specialized institutions, except medical.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey" and 1988 National Survey of Postsecondary Faculty, "Faculty Survey."

Table T2.2—Standard errors of number and percentage of higher education instructional faculty and staff in 4-year institutions, by employment status and program area: Fall 1987 and Fall 1992

Program area and year	Instructional faculty and staff	Employment status	
		Full-time	Part-time
1992			
All program areas in 4-year institutions*	16,233.62	1.15	1.15
Agriculture/home economics	1,452.41	3.18	3.18
Business	2,652.77	2.86	2.86
Education	2,731.52	2.62	2.62
Engineering	2,336.69	3.41	3.41
Fine arts	3,247.95	2.33	2.33
Humanities	2,484.92	1.45	1.45
Natural sciences	3,781.04	1.68	1.68
Social sciences	2,912.99	2.06	2.06
All other fields	4,485.12	2.07	2.07
1987			
All program areas in 4-year institutions*	17,298.42	1.27	1.27
Agriculture/home economics	1,816.41	5.63	5.63
Business	3,496.01	4.36	4.36
Education	2,154.29	2.43	2.43
Engineering	2,530.06	3.11	3.11
Fine arts	3,528.54	3.62	3.62
Humanities	3,391.56	1.80	1.80
Natural sciences	4,575.00	2.41	2.41
Social sciences	3,542.30	2.78	2.78
All other fields	3,533.02	3.91	3.91

* Health sciences faculty are included in the program area total but are not shown separately. See Technical Notes for details.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey" and 1988 National Survey of Postsecondary Faculty, "Faculty Survey."

Table T2.3—Standard errors of number and percentage of full-time higher education instructional faculty and staff, by academic rank and type and control of institution: Fall 1987 and Fall 1992

Type and control of institution and year	Full-time instructional faculty and staff	Academic rank: Full professor	Associate professor	Assistant professor	Instructor or lecturer	Other ranks/ Not applicable
1992						
All institutions[1]	11,450.61	0.73	0.53	0.55	0.56	0.43
Public research	11,263.61	2.00	1.28	1.42	1.06	0.69
Private research	6,335.28	2.99	2.58	2.19	1.79	2.18
Public doctoral[2]	4,958.27	1.52	1.28	1.47	0.84	0.39
Private doctoral[2]	3,769.06	3.57	2.96	2.92	1.82	0.77
Public comprehensive	3,593.03	1.57	1.02	1.01	0.78	0.30
Private comprehensive	2,079.46	1.83	1.68	1.75	1.20	1.22
Private liberal arts	1,898.91	2.08	1.67	1.60	1.35	2.06
Public 2-year	4,537.53	1.51	1.09	1.12	1.85	1.20
Other[3]	2,255.86	3.57	2.86	2.65	2.17	4.04
1987						
All institutions[1]	13,340.84	1.14	0.86	0.82	0.74	0.74
Public research	8,077.01	2.50	2.27	1.73	1.11	0.12
Private research	3,966.70	3.08	2.87	2.67	1.66	1.32
Public doctoral[2]	4,186.97	3.66	3.04	2.47	1.37	0.40
Private doctoral[2]	5,490.87	7.45	5.25	4.96	3.32	0.04
Public comprehensive	5,406.16	2.56	2.01	1.85	1.53	0.85
Private comprehensive	3,183.97	3.22	2.25	2.59	1.50	0.26
Private liberal arts	3,407.07	3.10	2.72	3.27	2.02	3.31
Public 2-year	4,433.65	2.24	1.46	1.91	2.58	2.98
Other[3]	1,852.84	4.30	3.55	3.01	2.42	5.43

[1] All accredited, nonproprietary U.S. postsecondary institutions that grant a 2-year (A.A.) or higher degree and whose accreditation at the higher education level is recognized by the U.S. Department of Education.

[2] Includes institutions classified by the Carnegie Foundation as specialized medical schools.

[3] Public liberal arts, private 2-year, and religious and other specialized institutions, except medical.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey" and 1988 National Survey of Postsecondary Faculty, "Faculty Survey."

Table T2.4—Standard errors of number and percentage of full-time higher education instructional faculty and staff in 4-year institutions, by academic rank and program area: Fall 1987 and Fall 1992

Program area and year	Full-time Instructional faculty and staff	Academic rank				
		Full professor	Associate professor	Assistant professor	Instructor or lecturer	Other ranks/ Not applicable
1992						
All program areas in 4-year institutions*	10,360.41	0.83	0.60	0.62	0.45	0.35
Agriculture/home economics	1,247.37	5.46	3.82	3.94	2.62	1.40
Business	1,520.63	1.94	2.10	1.80	1.18	0.61
Education	1,706.80	1.94	2.60	1.89	1.27	0.93
Engineering	1,712.21	2.77	2.52	2.32	1.19	0.33
Fine arts	1,985.64	2.95	2.43	2.25	1.65	2.45
Humanities	1,666.83	1.39	1.18	1.06	1.08	0.68
Natural sciences	3,075.74	1.53	1.22	1.17	0.71	0.72
Social sciences	1,960.52	1.76	1.54	1.50	0.98	0.41
All other fields	2,551.11	2.09	1.51	1.74	1.08	0.67
1987						
All program areas in 4-year institutions*	12,561.73	1.26	1.01	0.91	0.62	0.45
Agriculture/home economics	1,497.41	5.07	5.41	3.98	2.84	0.19
Business	2,093.79	3.01	2.80	3.03	2.48	1.99
Education	1,671.44	2.37	2.30	2.39	2.19	1.02
Engineering	2,114.78	3.57	3.17	3.05	1.38	0.00
Fine arts	1,839.03	2.69	2.95	3.01	1.66	2.23
Humanities	2,699.05	2.06	1.47	1.36	1.09	0.76
Natural sciences	3,327.39	2.30	1.87	1.70	1.09	0.64
Social sciences	2,845.25	3.10	2.64	2.56	0.88	0.82
All other fields	2,313.81	3.33	2.44	3.27	2.11	0.68

* Health sciences faculty are included in the program area total but are not shown separately. See Technical Notes for details.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey" and 1988 National Survey of Postsecondary Faculty, "Faculty Survey."

Table T2.5—Standard errors of number and percentage of full-time higher education instructional faculty and staff, by tenure status and type and control of institution: Fall 1987 and Fall 1992

Type and control of institution and year	Full-time instructional faculty and staff	Tenure status: Tenured	Tenure status: On tenure track	Tenure status: Not on tenure track	Tenure status: No tenure system for faculty status	Tenure status: No tenure system at institution
1992						
All institutions[1]	11,450.61	0.81	0.52	0.45	0.25	0.70
Public research	11,263.61	1.74	1.15	1.28	0.52	0.17
Private research	6,335.28	2.87	2.46	2.51	1.44	0.41
Public doctoral[2]	4,958.27	1.60	1.44	1.36	0.51	0.13
Private doctoral[2]	3,769.06	3.34	3.38	2.92	1.69	1.66
Public comprehensive	3,593.03	1.37	0.99	0.73	0.43	0.15
Private comprehensive	2,079.46	2.37	1.65	1.26	0.74	2.00
Private liberal arts	1,898.91	2.80	1.83	1.32	0.77	3.46
Public 2-year	4,537.53	2.15	1.14	0.55	0.56	2.25
Other[3]	2,255.86	4.76	2.40	1.55	1.04	6.58
1987						
All institutions[1]	13,340.84	1.19	0.81	0.55	0.35	1.04
Public research	8,077.01	2.33	1.39	1.26	0.94	0.63
Private research	3,966.70	3.24	3.53	2.60	1.09	1.24
Public doctoral[2]	4,186.97	2.76	2.04	2.08	0.96	0.21
Private doctoral[2]	5,490.87	7.27	7.74	1.50	2.89	7.52
Public comprehensive	5,406.16	2.06	1.86	1.05	0.54	0.71
Private comprehensive	3,183.97	3.38	3.03	1.94	1.32	1.96
Private liberal arts	3,407.07	3.74	2.71	1.57	1.43	4.67
Public 2-year	4,433.65	4.10	1.40	1.19	0.57	4.26
Other[3]	1,852.84	5.47	3.28	1.24	1.15	5.96

[1] All accredited, nonproprietary U.S. postsecondary institutions that grant a 2-year (A.A.) or higher degree and whose accreditation at the higher education level is recognized by the U.S. Department of Education.

[2] Includes institutions classified by the Carnegie Foundation as specialized medical schools.

[3] Public liberal arts, private 2-year, and religious and other specialized institutions, except medical.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey" and 1988 National Survey of Postsecondary Faculty, "Faculty Survey."

Table T2.6—Standard errors of number and percentage of full-time higher education instructional faculty and staff in 4-year institutions by tenure status and program area: Fall 1987 and Fall 1992

Program area and year	Full-time instructional faculty and staff	Tenure status				
		Tenured	On tenure track	Not on tenure track	No tenure system for faculty status	No tenure system at institution
1992						
All program areas in 4-year institutions*	10,360.41	0.85	0.61	0.54	0.28	0.58
Agriculture/home economics	1,247.37	4.46	3.89	1.42	2.21	0.46
Business	1,520.63	2.10	1.79	1.21	0.77	1.22
Education	1,706.80	2.17	1.67	1.39	0.80	0.88
Engineering	1,712.21	2.78	2.37	1.28	0.56	1.87
Fine arts	1,985.64	3.62	2.19	1.40	0.80	4.27
Humanities	1,666.83	1.53	0.97	0.90	0.73	0.90
Natural sciences	3,075.74	1.48	1.25	0.76	0.51	0.57
Social sciences	1,960.52	1.60	1.32	1.09	0.52	0.68
All other fields	2,551.11	1.80	1.55	1.30	0.96	1.00
1987						
All program areas in 4-year institutions*	12,561.73	1.12	0.94	0.63	0.42	0.80
Agriculture/home economics	1,497.41	3.46	3.41	2.15	2.18	0.30
Business	2,093.79	3.22	3.25	2.33	1.38	1.61
Education	1,671.44	2.64	2.10	1.98	1.05	1.35
Engineering	2,114.78	3.25	3.42	2.29	1.18	0.64
Fine arts	1,839.03	3.11	2.53	2.29	1.50	2.35
Humanities	2,699.05	1.84	1.31	0.86	0.76	1.13
Natural sciences	3,327.39	2.07	1.90	1.19	0.73	1.01
Social sciences	2,845.25	2.57	2.38	1.00	0.74	1.00
All other fields	2,313.81	3.50	3.21	1.94	0.98	1.04

* Health sciences faculty are included in the program area total but are not shown separately. See Technical Notes for details.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey" and 1988 National Survey of Postsecondary Faculty, "Faculty Survey."

Table T2.7—Standard errors of number and percentage of full-time higher education instructional faculty and staff with a doctoral or first professional degree, by type and control of institution: Fall 1987 and Fall 1992

Type and control of institution and year	Full-time instructional faculty and staff	Have doctoral or first professional degree	
		Yes	No
1992			
All institutions[1]	11,450.61	0.82	0.82
Public research	11,263.61	0.79	0.79
Private research	6,335.28	1.43	1.43
Public doctoral[2]	4,958.27	1.22	1.22
Private doctoral[2]	3,769.06	1.77	1.77
Public comprehensive	3,593.03	1.10	1.10
Private comprehensive	2,079.46	2.35	2.35
Private liberal arts	1,898.91	3.03	3.03
Public 2-year	4,537.53	1.08	1.08
Other[3]	2,255.86	4.92	4.92
1987			
All institutions[1]	13,340.84	1.13	1.13
Public research	8,077.01	1.94	1.94
Private research	3,966.70	2.73	2.73
Public doctoral[2]	4,186.97	2.09	2.09
Private doctoral[2]	5,490.87	3.96	3.96
Public comprehensive	5,406.16	2.29	2.29
Private comprehensive	3,183.97	3.69	3.69
Private liberal arts	3,407.07	3.79	3.79
Public 2-year	4,433.65	2.08	2.08
Other[3]	1,852.84	4.40	4.40

[1] All accredited, nonproprietary U.S. postsecondary institutions that grant a 2-year (A.A.) or higher degree and whose accreditation at the higher education level is recognized by the U.S. Department of Education.

[2] Includes institutions classified by the Carnegie Foundation as specialized medical schools.

[3] Public liberal arts, private 2-year, and religious and other specialized institutions, except medical.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey" and 1988 National Survey of Postsecondary Faculty, "Faculty Survey."

Table T2.8—Standard errors of number and percentage of full-time higher education instructional faculty and staff in 4-year institutions with a doctoral or first professional degree, by program area: Fall 1987 and Fall 1992

Program area and year	Full-time instructional faculty and staff	Have doctoral or first professional degree	
		Yes	No
1992			
All program areas in 4-year institutions*	10,360.41	0.70	0.70
Agriculture/home economics	1,247.37	3.34	3.34
Business	1,520.63	2.08	2.08
Education	1,706.80	1.64	1.64
Engineering	1,712.21	2.18	2.18
Fine arts	1,985.64	2.58	2.58
Humanities	1,666.83	1.24	1.24
Natural sciences	3,075.74	0.87	0.87
Social sciences	1,960.52	1.14	1.14
All other fields	2,551.11	2.16	2.16
1987			
All program areas in 4-year institutions*	12,561.73	1.04	1.04
Agriculture/home economics	1,497.41	3.65	3.65
Business	2,093.79	3.39	3.39
Education	1,671.44	2.80	2.80
Engineering	2,114.78	3.20	3.20
Fine arts	1,839.03	3.11	3.11
Humanities	2,699.05	1.58	1.58
Natural sciences	3,327.39	1.43	1.43
Social sciences	2,845.25	1.51	1.51
All other fields	2,313.81	3.15	3.15

* Health sciences faculty are included in the program area total but are not shown separately. See Technical Notes for details.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey" and 1988 National Survey of Postsecondary Faculty, "Faculty Survey."

Table T2.9—Standard errors of average age and age distribution of full-time instructional faculty and staff, by type and control of institution: Fall 1987 and Fall 1992

Type and control of institution and year	Full-time instructional faculty and staff	Average age	Age distribution					
			Under 35	35-44	45-54	55-64	65-70	71 or older
1992								
All institutions[1]	11,450.61	0.12	0.31	0.57	0.53	0.44	0.21	0.09
Public research	11,263.61	0.34	0.79	1.62	1.45	1.16	0.66	0.21
Private research	6,335.28	0.52	1.52	3.65	2.66	1.72	0.98	0.48
Public doctoral[2]	4,958.27	0.32	0.95	1.41	1.41	1.24	0.54	0.25
Private doctoral[2]	3,769.06	0.63	2.41	2.14	2.08	1.37	1.03	0.66
Public comprehensive	3,593.03	0.23	0.58	0.92	1.05	1.01	0.36	0.13
Private comprehensive	2,079.46	0.34	1.03	1.51	1.58	1.31	0.74	0.30
Private liberal arts	1,898.91	0.36	1.02	1.28	1.60	1.48	0.58	0.37
Public 2-year	4,537.53	0.20	0.51	0.90	0.95	0.87	0.31	0.21
Other[3]	2,255.86	0.57	1.25	2.00	1.54	2.34	0.81	0.56
1987								
All institutions[1]	13,340.84	0.18	0.61	0.82	0.76	0.69	0.43	0.07
Public research	8,077.01	0.38	1.23	1.89	1.66	1.25	0.56	0.05
Private research	3,966.70	0.66	2.41	3.24	2.18	1.89	1.33	0.00
Public doctoral[2]	4,186.97	0.56	2.06	2.18	2.29	1.71	1.35	0.00
Private doctoral[2]	5,490.87	1.53	4.46	6.81	3.88	4.16	5.80	0.42
Public comprehensive	5,406.16	0.42	1.10	1.58	2.03	1.99	0.48	0.11
Private comprehensive	3,183.97	0.59	1.62	2.51	2.42	1.96	1.06	0.68
Private liberal arts	3,407.07	0.49	1.85	1.89	2.46	2.08	1.16	0.36
Public 2-year	4,433.65	0.37	1.34	1.82	1.76	1.47	0.57	0.00
Other[3]	1,852.84	0.78	1.73	3.46	2.82	3.40	1.28	0.49

[1] All accredited, nonproprietary U.S. postsecondary institutions that grant a 2-year (A.A.) or higher degree and whose accreditation at the higher education level is recognized by the U.S. Department of Education.

[2] Includes institutions classified by the Carnegie Foundation as specialized medical schools.

[3] Public liberal arts, private 2-year, and religious and other specialized institutions, except medical.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey" and 1988 National Survey of Postsecondary Faculty, "Faculty Survey."

Table T2.10—Standard errors of average age and age distribution of full-time instructional faculty and staff in 4-year institutions, by program area: Fall 1987 and Fall 1992

Program area and year	Full-time instructional faculty and staff	Average age	Age distribution					
			Under 35	35-44	45-54	55-64	65-70	71 or older
1992								
All program areas in 4-year institutions*	10,360.41	0.14	0.38	0.66	0.62	0.50	0.25	0.11
Agriculture/home economics	1,247.37	0.95	2.90	4.12	4.00	3.32	2.04	1.28
Business	1,520.63	0.45	1.10	1.95	1.88	1.67	1.01	0.31
Education	1,706.80	0.34	0.64	1.72	1.75	1.63	0.89	0.16
Engineering	1,712.21	0.56	2.01	2.48	2.42	2.37	1.14	0.33
Fine arts	1,985.64	0.42	1.01	1.82	1.97	1.80	0.89	0.24
Humanities	1,666.83	0.30	0.70	1.08	1.36	1.24	0.55	0.27
Natural sciences	3,075.74	0.27	0.72	1.30	1.32	1.15	0.55	0.25
Social sciences	1,960.52	0.37	0.90	1.65	1.58	1.39	0.68	0.34
All other fields	2,551.11	0.38	1.13	1.64	1.52	1.52	0.64	0.47
1987								
All program areas in 4-year institutions*	12,561.73	0.21	0.69	0.92	0.85	0.79	0.52	0.08
Agriculture/home economics	1,497.41	0.80	3.29	3.70	4.90	3.75	1.61	0.00
Business	2,093.79	0.63	2.00	3.44	3.26	2.81	0.87	0.00
Education	1,671.44	0.56	1.88	2.18	2.27	2.40	0.71	0.18
Engineering	2,114.78	0.86	2.44	3.42	3.52	3.79	1.00	0.42
Fine arts	1,839.03	0.57	2.02	2.83	2.73	1.94	1.02	0.45
Humanities	2,699.05	0.35	0.73	1.55	1.72	1.76	0.81	0.20
Natural sciences	3,327.39	0.39	1.16	2.01	2.05	1.53	0.70	0.20
Social sciences	2,845.25	0.59	1.42	2.92	2.39	2.30	1.22	0.38
All other fields	2,313.81	0.75	2.15	3.06	2.96	2.52	2.20	0.32

* Health sciences faculty are included in the program area total but are not shown separately. See Technical Notes for details.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey" and 1988 National Survey of Postsecondary Faculty, "Faculty Survey."

Table T2.11—Standard errors of number and percentage of full-time higher education instructional faculty and staff, by sex and type and control of institution: Fall 1987 and Fall 1992

Type and control of institution and year	Full-time instructional faculty and staff	Sex	
		Male	Female
1992			
All institutions[1]	11,450.61	0.52	0.52
Public research	11,263.61	1.06	1.06
Private research	6,335.28	1.94	1.94
Public doctoral[2]	4,958.27	1.18	1.18
Private doctoral[2]	3,769.06	1.53	1.53
Public comprehensive	3,593.03	0.83	0.83
Private comprehensive	2,079.46	1.90	1.90
Private liberal arts	1,898.91	2.35	2.35
Public 2-year	4,537.53	1.02	1.02
Other[3]	2,255.86	3.35	3.35
1987			
All institutions[1]	13,340.84	0.83	0.83
Public research	8,077.01	1.65	1.65
Private research	3,966.70	2.98	2.98
Public doctoral[2]	4,186.97	1.98	1.98
Private doctoral[2]	5,490.87	5.70	5.70
Public comprehensive	5,406.16	1.72	1.72
Private comprehensive	3,183.97	3.31	3.31
Private liberal arts	3,407.07	2.97	2.97
Public 2-year	4,433.65	2.05	2.05
Other[3]	1,852.84	3.55	3.55

[1] All accredited, nonproprietary U.S. postsecondary institutions that grant a 2-year (A.A.) or higher degree and whose accreditation at the higher education level is recognized by the U.S. Department of Education.

[2] Includes institutions classified by the Carnegie Foundation as specialized medical schools.

[3] Public liberal arts, private 2-year, and religious and other specialized institutions, except medical.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey" and 1988 National Survey of Postsecondary Faculty, "Faculty Survey."

Table T2.12—Standard errors of number and percentage of full-time higher education instructional faculty and staff in 4-year institutions, by sex and program area: Fall 1987 and Fall 1992

Program area and year	Full-time instructional faculty and staff	Sex	
		Male	Female
1992			
All program areas in 4-year institutions*	10,360.41	0.53	0.53
Agriculture/home economics	1,247.37	3.88	3.88
Business	1,520.63	1.67	1.67
Education	1,706.80	1.84	1.84
Engineering	1,712.21	1.05	1.05
Fine arts	1,985.64	1.89	1.89
Humanities	1,666.83	1.32	1.32
Natural sciences	3,075.74	0.99	0.99
Social sciences	1,960.52	1.29	1.29
All other fields	2,551.11	1.53	1.53
1987			
All program areas in 4-year institutions*	12,561.73	0.88	0.88
Agriculture/home economics	1,497.41	5.92	5.92
Business	2,093.79	2.91	2.91
Education	1,671.44	2.73	2.73
Engineering	2,114.78	1.31	1.31
Fine arts	1,839.03	2.97	2.97
Humanities	2,699.05	1.54	1.54
Natural sciences	3,327.39	1.49	1.49
Social sciences	2,845.25	2.26	2.26
All other fields	2,313.81	3.22	3.22

* Health sciences faculty are included in the program area total but are not shown separately. See Technical Notes for details.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey" and 1988 National Survey of Postsecondary Faculty, "Faculty Survey."

Table T2.13—Standard errors of number and percentage of full-time higher education instructional faculty and staff, by race/ethnicity and type and control of institution: Fall 1987 and Fall 1992

Type and control of institution and year	Full-time instructional faculty and staff	Race/ethnicity				
		American Indian/ Alaskan Native	Asian/ Pacific Islander	Black, non-Hispanic	Hispanic	White, non-Hispanic
1992						
All institutions[1]	11,450.61	0.06	0.25	0.40	0.18	0.53
Public research	11,263.61	0.07	0.69	0.31	0.38	0.78
Private research	6,335.28	0.17	1.36	2.20	0.53	2.47
Public doctoral[2]	4,958.27	0.20	0.58	0.29	0.36	0.73
Private doctoral[2]	3,769.06	0.10	1.35	1.34	0.95	2.28
Public comprehensive	3,593.03	0.14	0.49	1.52	0.51	1.70
Private comprehensive	2,079.46	0.10	0.47	0.82	0.30	1.15
Private liberal arts	1,898.91	0.23	0.40	2.27	0.32	2.57
Public 2-year	4,537.53	0.20	0.44	0.78	0.53	1.16
Other[3]	2,255.86	0.32	1.71	1.15	0.40	2.58
1987						
All institutions[1]	13,340.84	0.13	0.44	0.53	0.24	0.73
Public research	8,077.01	0.29	0.78	0.47	0.35	0.89
Private research	3,966.70	0.00	1.08	3.80	1.48	3.63
Public doctoral[2]	4,186.97	0.50	1.32	0.61	0.23	1.45
Private doctoral[2]	5,490.87	0.41	5.25	1.98	0.72	5.48
Public comprehensive	5,406.16	0.29	0.95	1.37	0.46	1.80
Private comprehensive	3,183.97	0.62	1.19	0.97	0.52	2.09
Private liberal arts	3,407.07	0.55	1.19	3.34	0.65	4.11
Public 2-year	4,433.65	0.36	0.75	0.75	0.82	1.46
Other[3]	1,852.84	0.43	0.50	1.21	0.73	1.45

[1] All accredited, nonproprietary U.S. postsecondary institutions that grant a 2-year (A.A.) or higher degree and whose accreditation at the higher education level is recognized by the U.S. Department of Education.

[2] Includes institutions classified by the Carnegie Foundation as specialized medical schools.

[3] Public liberal arts, private 2-year, and religious and other specialized institutions, except medical.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey" and 1988 National Survey of Postsecondary Faculty, "Faculty Survey."

Table T2.14—Standard errors of number and percentage of full-time higher education instructional faculty and staff in 4-year institutions, by race/ethnicity and program area: Fall 1987 and Fall 1992

Program area and year	Full-time instructional faculty and staff	Race/ethnicity American Indian/ Alaskan Native	Asian/ Pacific Islander	Black, non-Hispanic	Hispanic	White, non-Hispanic
1992						
All program areas in 4-year institutions*	10,360.41	0.06	0.28	0.47	0.19	0.59
Agriculture/home economics	1,247.37	0.78	0.99	1.20	1.13	1.98
Business	1,520.63	0.27	0.83	0.66	0.48	1.23
Education	1,706.80	0.23	0.30	1.23	0.73	1.44
Engineering	1,712.21	0.23	2.06	0.91	0.63	2.45
Fine arts	1,985.64	0.25	0.96	0.92	0.73	1.49
Humanities	1,666.83	0.11	0.52	0.53	0.41	0.82
Natural sciences	3,075.74	0.12	0.72	0.69	0.26	1.11
Social sciences	1,960.52	0.17	0.48	0.74	0.48	0.99
All other fields	2,551.11	0.16	0.87	0.81	0.36	1.17
1987						
All program areas in 4-year institutions*	12,561.73	0.15	0.51	0.63	0.23	0.83
Agriculture/home economics	1,497.41	1.44	1.12	1.4	1.57	2.65
Business	2,093.79	0.9	1.99	1.51	0.53	2.53
Education	1,671.44	0.52	0.41	1.75	0.75	1.95
Engineering	2,114.78	0	2.23	0.48	0.85	2.29
Fine arts	1,839.03	0.33	0.54	1.45	0.73	1.78
Humanities	2,699.05	0.39	0.38	0.77	0.54	1.02
Natural sciences	3,327.39	0.26	1.16	0.63	0.55	1.43
Social sciences	2,845.25	0.29	1.02	1.2	0.66	1.7
All other fields	2,313.81	0.8	0.86	1.81	0.91	2.21

* Health sciences faculty are included in the program area total but are not shown separately. See Technical Notes for details.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey" and 1988 National Survey of Postsecondary Faculty, "Faculty Survey."

Table T2.15—Standard errors of number and percentage of full-time higher education instructional faculty and staff, by U.S. citizenship status and type and control of institution: Fall 1987 and Fall 1992

Type and control of institution and year	Full-time instructional faculty and staff	Citizenship status	
		Citizen	Non-citizen
1992			
All institutions[1]	11,450.61	0.38	0.38
Public research	11,263.61	0.91	0.91
Private research	6,335.28	3.34	3.34
Public doctoral[2]	4,958.27	0.67	0.67
Private doctoral[2]	3,769.06	1.45	1.45
Public comprehensive	3,593.03	0.45	0.45
Private comprehensive	2,079.46	0.52	0.52
Private liberal arts	1,898.91	0.62	0.62
Public 2-year	4,537.53	0.28	0.28
Other[3]	2,255.86	1.37	1.37
1987			
All institutions[1]	13,340.84	0.36	0.36
Public research	8,077.01	0.55	0.55
Private research	3,966.70	1.85	1.85
Public doctoral[2]	4,186.97	1.20	1.20
Private doctoral[2]	5,490.87	2.70	2.70
Public comprehensive	5,406.16	0.55	0.55
Private comprehensive	3,183.97	1.69	1.69
Private liberal arts	3,407.07	1.69	1.69
Public 2-year	4,433.65	0.68	0.68
Other[3]	1,852.84	0.85	0.85

[1] All accredited, nonproprietary U.S. postsecondary institutions that grant a 2-year (A.A.) or higher degree and whose accreditation at the higher education level is recognized by the U.S. Department of Education.

[2] Includes institutions classified by the Carnegie Foundation as specialized medical schools.

[3] Public liberal arts, private 2-year, and religious and other specialized institutions, except medical.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey," and 1988 National Survey of Postsecondary Faculty, "Faculty Survey."

Table T2.16—Standard errors of number and percentage of full-time higher education instructional faculty and staff in 4-year institutions, by U.S. citizenship status and program area: Fall 1987 and Fall 1992

Program area and year	Full-time instructional faculty and staff	Citizenship status	
		Citizen	Non-citizen
1992			
All program areas in 4-year institutions*	10,360.41	0.46	0.46
Agriculture/home economics	1,247.37	0.90	0.90
Business	1,520.63	1.15	1.15
Education	1,706.80	0.45	0.45
Engineering	1,712.21	1.80	1.80
Fine arts	1,985.64	0.68	0.68
Humanities	1,666.83	0.78	0.78
Natural sciences	3,075.74	1.02	1.02
Social sciences	1,960.52	1.09	1.09
All other fields	2,551.11	1.04	1.04
1987			
All program areas in 4-year institutions*	12,561.73	0.41	0.41
Agriculture/home economics	1,497.41	0.96	0.96
Business	2,093.79	1.76	1.76
Education	1,671.44	0.46	0.46
Engineering	2,114.78	2.59	2.59
Fine arts	1,839.03	0.75	0.75
Humanities	2,699.05	0.77	0.77
Natural sciences	3,327.39	1.13	1.13
Social sciences	2,845.25	1.23	1.23
All other fields	2,313.81	1.33	1.33

* Health sciences faculty are included in the program area total but are not shown separately. See Technical Notes for details.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey" and 1988 National Survey of Postsecondary Faculty, "Faculty Survey."

Table T3.1—Standard errors of mean number of hours worked by full-time instructional faculty and staff, by type and control of institution: Fall 1987 and Fall 1992

Type and control of institution and year	Full-time instructional faculty and staff	Mean hours worked per week
1992		
All institutions[1]	11,450.61	0.21
Public research	11,263.61	0.43
Private research	6,335.28	0.63
Public doctoral[2]	4,958.27	0.39
Private doctoral[2]	3,769.06	1.33
Public comprehensive	3,593.03	0.35
Private comprehensive	2,079.46	0.51
Private liberal arts	1,898.91	0.65
Public 2-year	4,537.53	0.37
Other[3]	2,255.86	0.94
1987		
All institutions[1]	13,340.84	0.31
Public research	8,077.01	0.62
Private research	3,966.70	1.28
Public doctoral[2]	4,186.97	0.67
Private doctoral[2]	5,490.87	1.25
Public comprehensive	5,406.16	0.70
Private comprehensive	3,183.97	0.89
Private liberal arts	3,407.07	0.99
Public 2-year	4,433.65	0.70
Other[3]	1,852.84	1.71

[1] All accredited, nonproprietary U.S. postsecondary institutions that grant a 2-year (A.A.) or higher degree and whose accreditation at the higher education level is recognized by the U.S. Department of Education.

[2] Includes institutions classified by the Carnegie Foundation as specialized medical schools.

[3] Public liberal arts, private 2-year, and religious and other specialized institutions, except medical.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey" and 1988 National Survey of Postsecondary Faculty, "Faculty Survey."

Table T3.2—Standard errors of mean number of hours worked by full-time instructional faculty and staff in 4-year institutions, by program area: Fall 1987 and Fall 1992

Program area and year	Full-time instructional faculty and staff	Mean hours worked per week
1992		
All program areas in 4-year institutions*	10,360.41	0.22
Agriculture/home economics	1,247.37	1.21
Business	1,520.63	0.71
Education	1,706.80	0.59
Engineering	1,712.21	0.88
Fine arts	1,985.64	0.66
Humanities	1,666.83	0.40
Natural sciences	3,075.74	0.42
Social sciences	1,960.52	0.50
All other fields	2,551.11	0.58
1987		
All program areas in 4-year institutions*	12,561.73	0.33
Agriculture/home economics	1,497.41	0.91
Business	2,093.79	0.65
Education	1,671.44	0.76
Engineering	2,114.78	0.79
Fine arts	1,839.03	1.03
Humanities	2,699.05	0.52
Natural sciences	3,327.39	0.58
Social sciences	2,845.25	0.70
All other fields	2,313.81	0.97

* Health sciences faculty are included in the program area total but are not shown separately. See Technical Notes for details.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey" and 1988 National Survey of Postsecondary Faculty, "Faculty Survey."

Table T3.3—Standard errors of percentage distribution of full-time instructional faculty and staff, by time allocation and type and control of institution: Fall 1987 and Fall 1992

Type and control of institution and year	Full-time instructional faculty and staff	Percentage of time spent on			
		Teaching activities	Research activities	Administrative activities	Other activities
1992					
All institutions[1]	11,450.61	0.49	0.42	0.24	0.22
Public research	11,263.61	0.80	0.95	0.54	0.65
Private research	6,335.28	1.43	1.94	0.80	1.07
Public doctoral[2]	4,958.27	1.11	0.97	0.56	0.70
Private doctoral[2]	3,769.06	2.62	1.49	1.36	1.70
Public comprehensive	3,593.03	0.68	0.51	0.39	0.28
Private comprehensive	2,079.46	0.96	0.87	0.84	0.42
Private liberal arts	1,898.91	0.86	0.74	0.68	0.48
Public 2-year	4,537.53	0.79	0.19	0.67	0.39
Other[3]	2,255.86	1.88	1.46	0.94	0.64
1987					
All institutions[1]	13,340.84	0.76	0.56	0.31	0.41
Public research	8,077.01	1.26	1.21	0.51	0.97
Private research	3,966.70	2.98	2.85	1.05	1.62
Public doctoral[2]	4,186.97	1.74	1.24	1.10	1.07
Private doctoral[2]	5,490.87	5.20	4.36	1.63	3.81
Public comprehensive	5,406.16	1.90	0.61	0.91	0.95
Private comprehensive	3,183.97	2.20	0.81	0.68	1.59
Private liberal arts	3,407.07	1.12	1.20	0.89	0.69
Public 2-year	4,433.65	1.01	0.33	0.72	0.59
Other[3]	1,852.84	1.71	1.21	1.24	1.03

[1] All accredited, nonproprietary U.S. postsecondary institutions that grant a 2-year (A.A.) or higher degree and whose accreditation at the higher education level is recognized by the U.S. Department of Education.

[2] Includes institutions classified by the Carnegie Foundation as specialized medical schools.

[3] Public liberal arts, private 2-year, and religious and other specialized institutions, except medical.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey" and 1988 National Survey of Postsecondary Faculty, "Faculty Survey."

Table T3.4—Standard errors of percentage distribution of full-time instructional faculty and staff in 4-year institutions, by time allocation and program area: Fall 1987 and Fall 1992

Program area and year	Full-time instructional faculty and staff	Percentage of time spent on			
		Teaching activities	Research activities	Administrative activities	Other activities
1992					
All program areas in 4-year institutions*	10,360.41	0.52	0.45	0.24	0.27
Agriculture/home economics	1,247.37	2.26	2.77	2.17	1.19
Business	1,520.63	1.12	0.86	0.82	0.64
Education	1,706.80	1.07	0.77	1.08	0.63
Engineering	1,712.21	1.72	1.53	1.00	0.86
Fine arts	1,985.64	1.28	0.93	0.75	0.71
Humanities	1,666.83	0.74	0.55	0.55	0.30
Natural sciences	3,075.74	0.96	0.96	0.41	0.35
Social sciences	1,960.52	0.97	0.84	0.66	0.49
All other fields	2,551.11	0.94	0.76	0.83	0.58
1987					
All program areas in 4-year institutions*	12,561.73	0.83	0.64	0.34	0.49
Agriculture/home economics	1,497.41	2.91	2.36	1.07	1.63
Business	2,093.79	1.37	1.21	0.86	0.98
Education	1,671.44	1.19	0.67	0.93	0.76
Engineering	2,114.78	1.65	1.41	0.91	0.79
Fine arts	1,839.03	1.19	1.17	0.94	0.98
Humanities	2,699.05	0.92	0.61	0.81	0.30
Natural sciences	3,327.39	1.15	1.11	0.60	0.45
Social sciences	2,845.25	1.24	1.12	0.83	0.71
All other fields	2,313.81	1.37	0.91	1.27	0.72

*Health sciences faculty are included in the program area total but are not shown separately. See Technical Notes for details.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey" and 1988 National Survey of Postsecondary Faculty, "Faculty Survey."

Table T3.5—Standard errors of mean number of classroom hours and student contact hours of full-time instructional faculty and staff, by type and control of institution: Fall 1987 and Fall 1992

Type and control of institution and year	Full-time instructional faculty and staff	Mean classroom hours	Mean student contact hours[1]
1992			
All institutions[2]	11,450.61	0.14	7.17
Public research	11,263.61	0.21	15.68
Private research	6,335.28	0.59	27.04
Public doctoral[3]	4,958.27	0.34	14.76
Private doctoral[3]	3,769.06	0.67	96.77
Public comprehensive	3,593.03	0.20	8.02
Private comprehensive	2,079.46	0.28	11.24
Private liberal arts	1,898.91	0.33	9.73
Public 2-year	4,537.53	0.32	14.02
Other[4]	2,255.86	0.87	26.64
1987			
All institutions[2]	13,340.84	0.16	7.56
Public research	8,077.01	0.22	12.10
Private research	3,966.70	0.49	40.25
Public doctoral[3]	4,186.97	0.39	22.18
Private doctoral[3]	5,490.87	0.62	41.68
Public comprehensive	5,406.16	0.35	12.64
Private comprehensive	3,183.97	0.28	23.18
Private liberal arts	3,407.07	0.63	19.18
Public 2-year	4,433.65	0.34	19.23
Other[4]	1,852.84	0.57	27.60

[1] Number of hours per week spent teaching classes, multiplied by the number of students in those classes.

[2] All accredited, nonproprietary U.S. postsecondary institutions that grant a 2-year (A.A.) or higher degree and whose accreditation at the higher education level is recognized by the U.S. Department of Education.

[3] Includes institutions classified by the Carnegie Foundation as specialized medical schools.

[4] Public liberal arts, private 2-year, and religious and other specialized institutions, except medical.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey" and 1988 National Survey of Postsecondary Faculty, "Faculty Survey."

Table T3.6—Standard errors of mean number of classroom hours and student contact hours of full-time instructional faculty and staff in 4-year institutions, by program area: Fall 1987 and Fall 1992

Program area and year	Full-time instructional faculty and staff	Mean classroom hours	Mean student contact hours[1]
1992			
All program areas in 4-year institutions[2]	10,360.41	0.14	8.49
Agriculture/home economics	1,247.37	0.68	21.28
Business	1,520.63	0.30	12.18
Education	1,706.80	0.34	20.93
Engineering	1,712.21	0.40	15.06
Fine arts	1,985.64	0.46	11.00
Humanities	1,666.83	0.21	8.99
Natural sciences	3,075.74	0.24	22.40
Social sciences	1,960.52	0.21	10.78
All other fields	2,551.11	0.43	13.24
1987			
All program areas in 4-year institutions[2]	12,561.73	0.15	7.87
Agriculture/home economics	1,497.41	0.52	24.20
Business	2,093.79	0.31	15.97
Education	1,671.44	0.34	15.63
Engineering	2,114.78	0.34	18.43
Fine arts	1,839.03	0.44	16.22
Humanities	2,699.05	0.21	10.25
Natural sciences	3,327.39	0.23	23.94
Social sciences	2,845.25	0.28	16.27
All other fields	2,313.81	0.38	12.26

[1] Number of hours per week spent teaching classes, multiplied by the number of students in those classes.

[2] Health sciences faculty are included in the program area total but are not shown separately. See Technical Notes for details.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey" and 1988 National Survey of Postsecondary Faculty, "Faculty Survey."

Table T3.7—Standard errors of mean number of publications and presentations in the past two years by full-time instructional faculty and staff, by type and control of institution: Fall 1987 and Fall 1992

Type and control of institution and year	Full-time instructional faculty and staff	Refereed or juried publications	Reviews and non-refereed publications	Books and book chapters	Monographs and technical reports	Presentations and exhibits	Patents, copyrights, and software
1992							
All institutions[1]	11,450.61	0.07	0.05	0.02	0.04	0.14	0.01
Public research	11,263.61	0.18	0.13	0.06	0.13	0.38	0.02
Private research	6,335.28	0.34	0.28	0.07	0.27	0.43	0.06
Public doctoral[2]	4,958.27	0.16	0.11	0.05	0.11	0.50	0.02
Private doctoral[2]	3,769.06	0.30	0.27	0.12	0.21	0.44	0.02
Public comprehensive	3,593.03	0.08	0.10	0.03	0.08	0.26	0.01
Private comprehensive	2,079.46	0.09	0.12	0.05	0.13	0.48	0.03
Private liberal arts	1,898.91	0.10	0.12	0.04	0.07	0.45	0.03
Public 2-year	4,537.53	0.03	0.06	0.02	0.06	0.14	0.01
Other[3]	2,255.86	0.15	0.19	0.06	0.20	0.96	0.03
1987							
All institutions[1]	13,340.84	0.1	0.09	0.03	0.11	0.19	0.05
Public research	8,077.01	0.22	0.16	0.12	0.42	0.41	0.03
Private research	3,966.70	0.56	0.21	0.12	0.1	0.3	0.22
Public doctoral[2]	4,186.97	0.25	0.42	0.06	0.22	0.66	0.04
Private doctoral[2]	5,490.87	0.66	0.2	0.18	0.21	0.86	0.05
Public comprehensive	5,406.16	0.12	0.25	0.05	0.29	0.45	0.13
Private comprehensive	3,183.97	0.14	0.2	0.04	0.3	1.01	0.09
Private liberal arts	3,407.07	0.21	0.23	0.05	0.1	0.46	0.06
Public 2-year	4,433.65	0.12	0.2	0.03	0.11	0.37	0.24
Other[3]	1,852.84	0.39	0.32	0.08	0.2	0.7	0.05

[1] All accredited, nonproprietary U.S. postsecondary institutions that grant a 2-year (A.A.) or higher degree and whose accreditation at the higher education level is recognized by the U.S. Department of Education.

[2] Includes institutions classified by the Carnegie Foundation as specialized medical schools.

[3] Public liberal arts, private 2-year, and religious and other specialized institutions, except medical.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey" and 1988 National Survey of Postsecondary Faculty, "Faculty Survey."

Table T3.8—Standard errors of mean number of publications and presentations in the past two years by full-time instructional faculty and staff in 4-year institutions, by program area: Fall 1987 and Fall 1992

Program area and year	Full-time instructional faculty and staff	Refereed or juried publications	Reviews and non-refereed publications	Books and book chapters	Monographs and technical reports	Presentations and exhibits	Patents, copyrights, and software
1992							
All program areas in 4-year institutions*	10,360.41	0.08	0.06	0.02	0.05	0.17	0.01
Agriculture/home economics	1,247.37	0.34	0.67	0.14	0.56	0.73	0.06
Business	1,520.63	0.16	0.14	0.07	0.18	0.28	0.06
Education	1,706.80	0.10	0.17	0.05	0.13	0.38	0.02
Engineering	1,712.21	0.35	0.23	0.06	0.42	0.69	0.06
Fine arts	1,985.64	0.10	0.19	0.04	0.11	1.74	0.04
Humanities	1,666.83	0.08	0.11	0.05	0.04	0.23	0.02
Natural sciences	3,075.74	0.21	0.09	0.04	0.12	0.17	0.02
Social sciences	1,960.52	0.10	0.15	0.06	0.16	0.27	0.02
All other fields	2,551.11	0.08	0.21	0.05	0.18	0.32	0.02
1987							
All program areas in 4-year institutions*	12,561.73	0.11	0.10	0.04	0.13	0.21	0.04
Agriculture/home economics	1,497.41	0.36	0.52	0.11	0.30	0.47	0.11
Business	2,093.79	0.16	0.13	0.06	0.19	0.18	0.13
Education	1,671.44	0.12	0.22	0.05	0.22	0.37	0.06
Engineering	2,114.78	0.29	0.20	0.08	0.43	0.30	0.41
Fine arts	1,839.03	0.13	0.29	0.04	0.06	1.92	0.07
Humanities	2,699.05	0.10	0.24	0.05	0.03	0.21	0.03
Natural sciences	3,327.39	0.20	0.13	0.05	0.61	0.20	0.17
Social sciences	2,845.25	0.17	0.23	0.10	0.13	0.23	0.03
	2,313.81	0.12	0.65	0.06	0.22	0.54	0.04

* Health sciences faculty are included in the program area total but are not shown separately. See Technical Notes for details.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey" and 1988 National Survey of Postsecondary Faculty, "Faculty Survey."

Table T3.9—Standard errors of percentage distribution of full-time instructional faculty and staff, by satisfaction with work load and type and control of institution: Fall 1987 and Fall 1992

Type and control of institution and year	Full-time instructional faculty and staff	Satisfaction with work load: Dissatisfied[1]	Somewhat satisfied	Very satisfied
1992				
All institutions[2]	11,450.61	0.51	0.50	0.50
Public research	11,263.61	1.15	1.25	1.23
Private research	6,335.28	1.75	2.91	2.31
Public doctoral[3]	4,958.27	1.36	1.49	1.43
Private doctoral[3]	3,769.06	2.71	2.30	2.90
Public comprehensive	3,593.03	1.23	0.90	1.04
Private comprehensive	2,079.46	1.67	1.48	1.66
Private liberal arts	1,898.91	1.68	1.53	1.44
Public 2-year	4,537.53	1.11	1.06	1.13
Other[4]	2,255.86	2.47	1.99	1.75
1987				
All institutions[2]	13,340.84	0.84	0.85	0.94
Public research	8,077.01	1.68	1.67	2.11
Private research	3,966.70	2.84	3.11	3.38
Public doctoral[3]	4,186.97	1.75	2.11	2.08
Private doctoral[3]	5,490.87	3.61	7.93	7.86
Public comprehensive	5,406.16	2.64	1.62	1.93
Private comprehensive	3,183.97	3.17	2.89	2.31
Private liberal arts	3,407.07	3.16	2.45	3.07
Public 2-year	4,433.65	1.79	1.97	2.14
Other[4]	1,852.84	3.42	3.53	4.05

[1] Percentage who said "very dissatisfied" or "somewhat dissatisfied."

[2] All accredited, nonproprietary U.S. postsecondary institutions that grant a 2-year (A.A.) or higher degree and whose accreditation at the higher education level is recognized by the U.S. Department of Education.

[3] Includes institutions classified by the Carnegie Foundation as specialized medical schools.

[4] Public liberal arts, private 2-year, and religious and other specialized institutions, except medical.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey" and 1988 National Survey of Postsecondary Faculty, "Faculty Survey."

Table T3.10—Standard errors of percentage distribution of full-time instructional faculty and staff in 4-year institutions, by satisfaction with work load and program area: Fall 1987 and Fall 1992

Program area and year	Full-time instructional faculty and staff	Satisfaction with work load		
		Dissatisfied[1]	Somewhat satisfied	Very satisfied
1992				
All program areas in 4-year institutions[2]	10,360.41	0.59	0.57	0.57
Agriculture/home economics	1,247.37	4.44	4.25	4.53
Business	1,520.63	1.99	2.23	2.25
Education	1,706.80	1.80	1.88	1.80
Engineering	1,712.21	2.62	2.85	2.30
Fine arts	1,985.64	2.07	1.99	2.25
Humanities	1,666.83	1.29	1.22	1.28
Natural sciences	3,075.74	1.26	1.30	1.32
Social sciences	1,960.52	1.67	1.75	1.71
All other fields	2,551.11	1.91	1.78	1.70
1987				
All program areas in 4-year institutions[2]	12,561.73	0.96	0.94	1.05
Agriculture/home economics	1,497.41	3.70	5.39	5.01
Business	2,093.79	2.96	2.97	3.42
Education	1,671.44	2.43	2.52	2.37
Engineering	2,114.78	3.93	3.63	3.44
Fine arts	1,839.03	2.86	2.83	2.85
Humanities	2,699.05	1.76	1.58	1.80
Natural sciences	3,327.39	2.02	2.08	2.04
Social sciences	2,845.25	2.77	2.40	2.51
	2,313.81	2.77	3.40	3.55

[1] Percentage who said "very dissatisfied" or "somewhat dissatisfied."

[2] Health sciences faculty are included in the program area total but are not shown separately. See Technical Notes for details.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey" and 1988 National Survey of Postsecondary Faculty, "Faculty Survey."

Table T3.11—Standard errors of percentage distribution of full-time instructional faculty and staff, by perception of pressure to increase work load in recent years and type and control of institution: Fall 1992

Type and control of institution and year	Full-time instructional faculty and staff	Worsened	Stayed the same	Improved	Don't know
1992					
All institutions[1]	11,450.61	0.75	0.69	0.33	0.26
Public research	11,263.61	1.96	1.82	0.86	0.64
Private research	6,335.28	3.11	3.59	1.29	1.32
Public doctoral[2]	4,958.27	1.98	1.71	0.67	0.67
Private doctoral[2]	3,769.06	3.58	2.75	2.27	1.41
Public comprehensive	3,593.03	1.39	1.16	0.58	0.48
Private comprehensive	2,079.46	1.83	1.81	1.47	0.75
Private liberal arts	1,898.91	2.38	2.15	1.69	0.98
Public 2-year	4,537.53	1.16	1.10	0.46	0.53
Other[3]	2,255.86	4.29	3.65	1.40	1.21

[1] All accredited, nonproprietary U.S. postsecondary institutions that grant a 2-year (A.A.) or higher degree and whose accreditation at the higher education level is recognized by the U.S. Department of Education.

[2] Includes institutions classified by the Carnegie Foundation as specialized medical schools.

[3] Public liberal arts, private 2-year, and religious and other specialized institutions, except medical.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey."

Table T3.12—Standard errors of percentage distribution of full-time instructional faculty and staff in 4-year institutions, by perception of pressure to increase work load in recent years and program area: Fall 1992

Program area and year	Full-time instructional faculty and staff	Worsened	Stayed the same	Improved	Don't know
1992					
All program areas in 4-year institutions*	10,360.41	0.90	0.81	0.41	0.29
Agriculture/home economics	1,247.37	4.55	4.49	3.53	1.56
Business	1,520.63	2.40	2.25	1.33	0.99
Education	1,706.80	2.69	2.09	1.25	0.88
Engineering	1,712.21	3.11	2.79	1.76	1.14
Fine arts	1,985.64	2.61	2.46	1.51	1.09
Humanities	1,666.83	1.52	1.39	0.87	0.56
Natural sciences	3,075.74	1.68	1.72	0.85	0.56
Social sciences	1,960.52	1.87	1.72	0.90	0.76
All other fields	2,551.11	2.19	1.70	1.53	1.23

* Health sciences faculty are included in the program area total but are not shown separately. See Technical Notes for details.

SOURCE: U.S. Department of Education, National Center for Education Statistics, "1993 National Study of Postsecondary Faculty."

Table T4.1—Standard errors of mean income of full-time instructional faculty and staff, by source of income and type and control of institution: Fall 1987 and Fall 1992

Type and control of institution and year	Full-time instructional faculty and staff	Total earned income	Source of income			
			Basic salary from institution	Other income from institution	Outside consulting income	Other outside income
1992						
All institutions[1]	11,450.61	910.38	674.38	192.86	154.77	327.78
Public research	11,263.61	2,543.14	2,019.53	621.24	333.03	876.57
Private research	6,335.28	6,356.38	3,524.65	1,150.91	1,637.53	2,610.90
Public doctoral[2]	4,958.27	1,714.59	1,502.14	387.92	251.00	623.55
Private doctoral[2]	3,769.06	3,739.88	3,695.08	520.85	460.85	1,942.15
Public comprehensive	3,593.03	1,318.81	790.50	434.27	142.95	769.27
Private comprehensive	2,079.46	2,123.28	1,753.12	349.57	700.45	622.40
Private liberal arts	1,898.91	1,352.91	1,098.36	157.74	678.07	275.50
Public 2-year	4,537.53	974.02	679.68	240.15	192.86	435.57
Other[3]	2,255.86	2,071.50	1,739.94	942.50	389.95	628.91
1987						
All institutions[1]	13,340.84	1,301.75	856.85	301.74	154.73	623.65
Public research	8,077.01	3,329.18	2,310.27	587.16	269.44	699.71
Private research	3,966.70	6,189.13	2,891.89	2,888.94	1,153.52	2,965.88
Public doctoral[2]	4,186.97	4,314.20	2,290.83	656.61	282.28	2,224.31
	5,490.87	5,512.55	6,145.32	599.80	1,120.61	7,485.55
Public comprehensive	5,406.16	2,752.62	2,031.42	213.05	401.00	401.13
Private comprehensive	3,183.97	5,417.98	1,473.55	337.63	402.67	4,339.26
Private liberal arts	3,407.07	1,785.14	1,501.67	276.63	209.14	336.67
Public 2-year	4,433.65	938.15	787.40	248.80	88.45	425.90
Other[3]	1,852.84	2,456.04	1,645.53	604.21	430.66	1,376.27

[1] All accredited, nonproprietary U.S. postsecondary institutions that grant a 2-year (A.A.) or higher degree and whose accreditation at the higher education level is recognized by the U.S. Department of Education.

[2] Includes institutions classified by the Carnegie Foundation as specialized medical schools.

[3] Public liberal arts, private 2-year, and religious and other specialized institutions, except medical.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey" and 1988 National Survey of Postsecondary Faculty, "Faculty Survey."

Table T4.2—Standard errors of mean income of full-time instructional faculty and staff in 4-year institutions, by source of income and program area: Fall 1987 and Fall 1992

Program area and year	Full-time instructional faculty and staff	Total earned income	Source of income			
			Basic salary from institution	Other income from institution	Outside consulting income	Other outside income
1992						
All program areas in 4-year institutions*	10,360.41	1,115.73	825.35	241.74	194.02	408.53
Agriculture/home economics	1,247.37	3,133.43	2,161.29	610.96	1,866.64	845.91
Business	1,520.63	2,912.54	2,045.38	346.99	879.14	1,549.42
Education	1,706.80	1,453.28	902.77	234.02	192.59	978.98
Engineering	1,712.21	2,556.41	1,950.40	1,157.13	925.97	671.38
Fine arts	1,985.64	2,847.05	2,328.07	243.36	916.52	942.07
Humanities	1,666.83	948.45	672.21	172.42	94.69	674.84
Natural sciences	3,075.74	1,468.20	1,150.99	229.34	216.86	849.20
Social sciences	1,960.52	1,647.90	826.54	800.83	1,038.98	476.53
All other fields	2,551.11	1,887.58	1,397.74	374.56	362.35	1,288.72
1987						
All program areas in 4-year institutions*	12,561.73	1,543.40	1,009.66	368.68	187.58	763.66
Agriculture/home economics	1,497.41	1,723.77	1,531.41	287.81	159.27	517.43
Business	2,093.79	2,567.23	1,223.59	573.34	1,604.93	707.11
Education	1,671.44	1,044.72	762.50	283.14	259.04	412.45
Engineering	2,114.78	2,161.36	1,242.37	547.70	752.85	1,150.24
Fine arts	1,839.03	984.22	756.57	200.95	234.61	389.10
Humanities	2,699.05	936.94	846.31	149.65	96.80	158.87
Natural sciences	3,327.39	1,183.48	926.00	331.61	232.28	401.80
Social sciences	2,845.25	3,297.87	1,113.75	280.44	419.23	2,532.19
All other fields	2,313.81	1,919.01	1,395.43	816.42	495.76	862.95

* Health sciences faculty are included in the program area total but are not shown separately. See Technical Notes for details.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey" and 1988 National Survey of Postsecondary Faculty, "Faculty Survey."

Table T4.3—Standard errors of income for full-time instructional faculty and staff with income beyond basic salary from institution, by source of income and type and control of institution: Fall 1987 and Fall 1992

Type and control of institution and year	Other income from institution			Consulting income			Other outside income		
	Number[1]	Percent of total	Mean	Number[1]	Percent of total	Mean	Number[1]	Percent of total	Mean
1992									
All institutions[2]	6,248.68	0.62	358.91	3,880.66	0.50	615.56	5,996.76	0.56	700.32
Public research	5,060.03	1.56	1,257.06	3,702.70	1.68	1,013.36	5,775.48	1.39	1,721.08
Private research	2,726.84	2.08	2,631.93	1,992.79	2.96	4,663.39	3,201.82	3.98	4,478.83
Public doctoral[3]	2,697.58	1.61	815.20	1,408.26	1.16	893.80	2,290.41	1.32	1,326.40
Private doctoral[3]	1,925.05	2.83	964.87	1,000.30	1.89	1,936.86	2,097.23	3.75	3,894.83
Public comprehensive	2,147.27	1.19	790.25	1,430.21	0.92	479.80	1,817.03	1.00	1,737.84
Private comprehensive	1,515.67	1.85	635.11	715.38	1.37	2,895.11	1,041.88	1.63	1,387.88
Private liberal arts	1,437.37	2.02	256.63	560.31	1.29	3,602.62	1,037.66	1.92	554.94
Public 2-year	3,020.22	1.16	349.76	1,030.17	0.68	1,187.99	1,979.89	0.86	1,108.68
Other[4]	1,498.54	3.54	1,639.06	593.83	1.22	1,823.58	1,095.13	2.28	1,365.98
1987									
All institutions[2]	8,270.48	1.08	544.54	5,673.46	0.79	534.90	8,331.69	0.92	1,360.84
Public research	4,660.77	2.08	1,121.60	3,260.32	1.41	781.74	5,062.17	1.87	1,278.84
Private research	2,393.81	3.23	5,384.82	1,996.65	3.15	3,039.96	2,668.56	3.36	5,610.31
Public doctoral[3]	2,528.38	3.01	1,182.90	1,521.30	1.94	919.63	2,678.07	3.04	4,435.56
Private doctoral[3]	1,270.12	7.55	761.54	2,122.36	6.97	3,549.66	2,772.29	4.28	15,081.01
Public comprehensive	3,104.19	2.66	396.11	2,415.55	1.72	1,295.14	3,657.26	2.24	766.56
Private comprehensive	1,903.17	2.69	457.88	1,081.32	2.43	1,708.90	1,961.93	3.10	9,699.57
Private liberal arts	2,334.04	4.03	447.17	975.22	2.17	1,197.50	1,721.10	2.89	915.61
Public 2-year	3,759.96	2.23	281.65	1,832.03	1.70	386.45	2,335.09	1.95	1,068.08
Other[4]	1,541.53	4.52	993.04	738.64	3.42	1,607.56	1,321.63	3.58	2,229.99

[1] Includes only those faculty with income from the source.

[2] All accredited, nonproprietary U.S. postsecondary institutions that grant a 2-year (A.A.) or higher degree and whose accreditation at the higher education level is recognized by the U.S. Department of Education.

[3] Includes institutions classified by the Carnegie Foundation as specialized medical schools.

[4] Public liberal arts, private 2-year, and religious and other specialized institutions, except medical.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey" and 1988 National Survey of Postsecondary Faculty, "Faculty Survey."

Table T4.4—Standard errors of income for full-time instructional faculty and staff in 4-year institutions with income beyond basic salary from institution, by source of income and program area: Fall 1987 and Fall 1992

Program area and year	Other income from institution			Consulting income			Other outside income		
	Number[1]	Percent of total	Mean	Number[1]	Percent of total	Mean	Number[1]	Percent of total	Mean
1992									
All program areas in 4-year institutions[2]	5,390.77	0.70	466.15	3,677.42	0.61	700.50	5,619.39	0.68	833.92
Agriculture/home economics	517.86	3.81	1,746.91	432.03	3.52	8,531.44	656.63	5.03	2,319.39
Business	1,103.63	1.86	459.36	805.28	2.07	2,359.37	912.19	2.26	3,597.81
Education	1,105.58	1.80	299.43	671.40	2.06	468.25	930.94	1.87	2,262.09
Engineering	1,174.52	3.09	1,864.48	1,030.08	3.16	2,153.09	858.61	2.79	1,712.67
Fine arts	1,056.89	2.22	472.22	794.46	1.97	3,093.05	1,298.29	2.48	1,418.46
Humanities	1,101.04	1.38	288.47	521.41	0.89	614.74	1,083.46	1.39	1,461.59
Natural sciences	1,915.89	1.55	389.74	1,332.35	1.35	846.38	1,720.04	1.49	2,089.17
Social sciences	1,389.41	1.81	1,437.02	990.34	1.71	3,736.63	1,499.71	1.82	878.64
All other fields	1,471.38	1.89	618.58	881.20	1.65	1,155.82	1,173.03	1.91	2,802.26
1987									
All program areas in 4-year institutions[2]	7,355.58	1.20	696.78	5,362.97	0.88	601.78	7,953.35	1.01	1,603.01
Agriculture/home economics	573.52	4.46	741.23	626.88	4.10	439.94	715.75	4.96	1,528.00
Business	1,807.48	3.10	756.23	1,408.64	3.57	3,397.73	1,231.42	3.33	1,536.80
Education	1,397.24	2.63	359.11	859.75	2.48	847.88	1,032.06	2.54	871.69
Engineering	1,251.35	3.81	776.19	1,368.78	3.85	1,348.21	1,074.38	3.42	3,000.00
Fine arts	1,240.44	3.09	289.92	884.86	2.73	779.52	1,446.14	3.18	537.79
Humanities	1,679.98	1.83	266.83	1,053.72	1.52	472.53	1,706.67	1.89	334.15
Natural sciences	2,481.79	2.32	484.75	1,586.25	1.73	818.83	2,058.66	2.13	937.73
Social sciences	2,060.29	2.73	431.62	1,516.53	2.61	1,115.48	1,853.44	2.74	5,321.43
All other fields	1,522.55	3.25	1,568.32	1,194.02	2.90	1,197.57	1,507.87	3.56	1,652.71

[1] Includes only those faculty with income from the source.

[2] Health sciences faculty are included in the program area total but are not shown separately. See Technical Notes for details.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey" and 1988 National Survey of Postsecondary Faculty, "Faculty Survey."

Table T4.5—Standard errors of percentage distribution of full-time instructional faculty and staff, by satisfaction with salary and type and control of institution: Fall 1987 and Fall 1992

Type and control of institution and year	Full-time instructional faculty and staff	Satisfaction with salary	
		Dissatisfied[1]	Satisfied[2]
1992			
All institutions[3]	11,450.61	0.78	0.78
Public research	11,263.61	1.97	1.97
Private research	6,335.28	2.90	2.90
Public doctoral[4]	4,958.27	1.52	1.52
Private doctoral[4]	3,769.06	5.08	5.08
Public comprehensive	3,593.03	1.69	1.69
Private comprehensive	2,079.46	2.42	2.42
Private liberal arts	1,898.91	2.54	2.54
Public 2-year	4,537.53	1.51	1.51
Other[5]	2,255.86	3.40	3.40
1987			
All institutions[3]	13,340.84	1.12	1.12
Public research	8,077.01	2.41	2.41
Private research	3,966.70	4.37	4.37
Public doctoral[4]	4,186.97	3.29	3.29
Private doctoral[4]	5,490.87	5.48	5.48
Public comprehensive	5,406.16	2.77	2.77
Private comprehensive	3,183.97	2.97	2.97
Private liberal arts	3,407.07	5.24	5.24
Public 2-year	4,433.65	2.40	2.40
Other[5]	1,852.84	4.34	4.34

[1] Percentage who said "very dissatisfied" or "somewhat dissatisfied."

[2] Percentage who said "very satisfied" or "somewhat satisfied."

[3] All accredited, nonproprietary U.S. postsecondary institutions that grant a 2-year (A.A.) or higher degree and whose accreditation at the higher education level is recognized by the U.S. Department of Education.

[4] Includes institutions classified by the Carnegie Foundation as specialized medical schools.

[5] Public liberal arts, private 2-year, and religious and other specialized institutions, except medical.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey" and 1988 National Survey of Postsecondary Faculty, "Faculty Survey."

Table T4.6—Standard errors of percentage distribution of full-time instructional faculty and staff in 4-year institutions, by satisfaction with salary and program area: Fall 1987 and Fall 1992

Program area and year	Full-time instructional faculty and staff	Satisfaction with salary	
		Dissatisfied[1]	Satisfied[2]
1992			
All program areas in 4-year institutions[3]	10,360.41	0.92	0.92
Agriculture/home economics	1,247.37	4.41	4.41
Business	1,520.63	2.30	2.30
Education	1,706.80	2.07	2.07
Engineering	1,712.21	2.74	2.74
Fine arts	1,985.64	2.61	2.61
Humanities	1,666.83	1.42	1.42
Natural sciences	3,075.74	1.62	1.62
Social sciences	1,960.52	1.94	1.94
All other fields	2,551.11	2.48	2.48
1987			
All program areas in 4-year institutions[3]	12,561.73	1.29	1.29
Agriculture/home economics	1,497.41	5.01	5.01
Business	2,093.79	3.35	3.35
Education	1,671.44	2.79	2.79
Engineering	2,114.78	3.94	3.94
Fine arts	1,839.03	3.16	3.16
Humanities	2,699.05	1.99	1.99
Natural sciences	3,327.39	2.35	2.35
Social sciences	2,845.25	3.06	3.06
All other fields	2,313.81	3.29	3.29

[1] Percentage who said "very dissatisfied" or "somewhat dissatisfied."

[2] Percentage who said "very satisfied" or "somewhat satisfied."

[3] Health sciences faculty are included in the program area total but are not shown separately. See Technical Notes for details.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey" and 1988 National Survey of Postsecondary Faculty, "Faculty Survey."

Table T4.7—Standard errors of percentage distribution of full-time instructional faculty and staff, by satisfaction with benefits and type and control of institution: Fall 1987 and Fall 1992

Type and control of institution and year	Full-time instructional faculty and staff	Satisfaction with benefits	
		Dissatisfied[1]	Satisfied[2]
1992			
All institutions[3]	11,450.61	0.73	0.73
Public research	11,263.61	2.49	2.49
Private research	6,335.28	2.26	2.26
Public doctoral[4]	4,958.27	1.49	1.49
Private doctoral[4]	3,769.06	3.17	3.17
Public comprehensive	3,593.03	1.32	1.32
Private comprehensive	2,079.46	2.25	2.25
Private liberal arts	1,898.91	2.32	2.32
Public 2-year	4,537.53	0.99	0.99
Other[5]	2,255.86	3.86	3.86
1987			
All institutions[3]	13,340.84	0.93	0.93
Public research	8,077.01	2.57	2.57
Private research	3,966.70	2.88	2.88
Public doctoral[4]	4,186.97	2.72	2.72
Private doctoral[4]	5,490.87	3.68	3.68
Public comprehensive	5,406.16	2.28	2.28
Private comprehensive	3,183.97	2.78	2.78
Private liberal arts	3,407.07	3.97	3.97
Public 2-year	4,433.65	1.66	1.66
Other[5]	1,852.84	3.14	3.14

[1] Percentage who said "very dissatisfied" or "somewhat dissatisfied."

[2] Percentage who said "very satisfied" or "somewhat satisfied."

[3] All accredited, nonproprietary U.S. postsecondary institutions that grant a 2-year (A.A.) or higher degree and whose accreditation at the higher education level is recognized by the U.S. Department of Education.

[4] Includes institutions classified by the Carnegie Foundation as specialized medical schools.

[5] Public liberal arts, private 2-year, and religious and other specialized institutions, except medical.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey" and 1988 National Survey of Postsecondary Faculty, "Faculty Survey."

Table T4.8—Standard errors of percentage distribution of full-time instructional faculty and staff in 4-year institutions, by satisfaction with benefits and program area: Fall 1987 and Fall 1992

Program area and year	Full-time instructional faculty and staff	Satisfaction with benefits	
		Dissatisfied[1]	Satisfied[2]
1992			
All program areas in 4-year institutions[3]	10,360.41	0.91	0.91
Agriculture/home economics	1,247.37	4.14	4.14
Business	1,520.63	2.12	2.12
Education	1,706.80	1.79	1.79
Engineering	1,712.21	2.77	2.77
Fine arts	1,985.64	2.38	2.38
Humanities	1,666.83	1.34	1.34
Natural sciences	3,075.74	1.52	1.52
Social sciences	1,960.52	1.75	1.75
All other fields	2,551.11	2.07	2.07
1987			
All program areas in 4-year institutions[3]	12,561.73	1.09	1.09
Agriculture/home economics	1,497.41	3.93	3.93
Business	2,093.79	3.11	3.11
Education	1,671.44	2.53	2.53
Engineering	2,114.78	3.03	3.03
Fine arts	1,839.03	2.78	2.78
Humanities	2,699.05	1.70	1.70
Natural sciences	3,327.39	2.08	2.08
Social sciences	2,845.25	2.54	2.54
All other fields	2,313.81	3.24	3.24

[1] Percentage who said "very dissatisfied" or "somewhat dissatisfied."

[2] Percentage who said "very satisfied" or "somewhat satisfied."

[3] Health sciences faculty are included in the program area total but are not shown separately. See Technical Notes for details.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey" and 1988 National Survey of Postsecondary Faculty, "Faculty Survey."

Part-Time Faculty

Standard Error Tables

Table TA-2.3—Standard errors of number and percentage of part-time higher education instructional faculty and academic rank and type and control of institution: Fall 1987 and Fall 1992 staff

Type and control of institution and year	Part-time instructional faculty and staff	Academic rank				
		Full professor	Associate professor	Assistant professor	Instructor or lecturer	Other ranks/ Not applicable
1992						
All institutions[1]	14,251.60	0.63	0.71	0.64	1.28	0.54
Public research	3,855.94	3.00	4.36	2.84	5.79	2.02
Private research	5,705.40	3.44	6.63	5.09	8.37	3.73
Public doctoral[2]	3,466.44	1.90	6.32	1.84	6.60	3.15
Private doctoral[2]	3,391.30	4.38	3.32	7.16	8.16	2.07
Public comprehensive	4,873.18	1.13	0.70	0.90	2.16	1.52
Private comprehensive	4,211.43	2.45	0.99	1.91	2.87	1.37
Private liberal arts	2,858.25	2.21	1.02	2.48	3.16	1.09
Public 2-year	9,467.70	0.62	0.40	0.56	1.31	0.77
Other[3]	2,979.29	3.37	2.18	1.79	5.75	2.63
1987						
All institutions[1]	13,428.77	1.01	0.73	1.20	1.95	1.45
Public research	2,771.77	4.56	4.62	4.75	5.86	3.20
Private research	2,884.28	5.46	5.23	8.91	11.94	6.06
Public doctoral[2]	1,593.29	2.62	1.56	6.30	5.98	1.21
Private doctoral[2]	4,200.42	3.42	6.62	11.83	13.46	2.32
Public comprehensive	4,894.27	1.56	0.95	3.45	4.27	2.72
Private comprehensive	2,737.53	3.14	2.17	3.26	5.82	2.36
Private liberal arts	3,418.34	3.17	2.17	2.18	8.00	7.69
Public 2-year	9,411.19	1.86	0.66	0.73	2.89	2.34
Other[3]	4,041.73	2.07	2.38	3.11	7.02	7.27

[1] All accredited, nonproprietary U.S. postsecondary institutions that grant a 2-year (A.A.) or higher degree and whose accreditation at the higher education level is recognized by the U.S. Department of Education.

[2] Includes institutions classified by the Carnegie Foundation as specialized medical schools.

[3] Public liberal arts, private 2-year, and religious and other specialized institutions, except medical.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey" and 1988 National Survey of Postsecondary Faculty, "Faculty Survey."

Table TA-2.4—Standard errors of number and percentage of part-time higher education instructional faculty and staff in 4-year institutions, by academic rank and program area: Fall 1987 and Fall 1992

Program area and year	Part-time instructional faculty and staff	Academic rank				
		Full professor	Associate professor	Assistant professor	Instructor or lecturer	Other ranks/ Not applicable
1992						
All program areas in 4-year institutions*	10,285.21	1.01	1.25	1.08	1.87	0.77
Agriculture/home economics	425.00	—	11.31	—	13.28	6.02
Business	1,993.88	2.60	2.01	3.51	4.10	2.05
Education	2,008.72	1.80	1.50	1.96	3.09	1.90
Engineering	1,215.01	5.92	3.41	5.18	7.20	5.56
Fine arts	1,930.78	3.03	1.46	2.12	4.00	2.58
Humanities	1,708.80	1.29	1.25	1.12	2.34	1.47
Natural sciences	2,055.67	3.41	2.32	1.77	4.02	2.68
Social sciences	1,934.47	2.08	2.23	2.40	3.67	2.22
All other fields	2,799.72	2.88	1.65	1.28	4.01	1.60
1987						
All program areas in 4-year	9,569.01	1.12	1.14	1.90	2.60	1.81
Agriculture/home economics	801.52	7.84	15.06	2.24	12.23	7.85
Business	2,623.00	4.33	1.44	2.53	8.79	9.02
Education	1,219.19	2.50	2.43	2.76	5.85	4.34
Engineering	995.26	4.42	6.22	4.62	8.17	1.22
Fine arts	2,868.38	1.41	1.74	2.07	6.82	6.79
Humanities	1,831.91	1.05	1.12	1.55	4.14	4.21
Natural sciences	2,889.61	4.09	4.25	2.19	6.34	4.22
Social sciences	1,912.53	1.34	2.60	6.97	7.91	3.03
All other fields	2,572.32	3.79	1.15	4.11	6.39	2.15

— Too few cases for a reliable estimate.

* Health sciences faculty are included in the program area total but are not shown separately. See Technical Notes for details.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey" and 1988 National Survey of Postsecondary Faculty, "Faculty Survey."

Table TA-2.5—Standard errors of number and percentage of part-time higher education instructional faculty and staff, by tenure status and type and control of institution: Fall 1987 and Fall 1992

Type and control of institution and year	Part-time instructional faculty and staff	Tenure status				
		Tenured	On tenure track	Not on tenure track	No tenure system for faculty status	No tenure system at institution
1992						
All institutions[1]	14,251.60	0.36	0.19	0.92	0.93	0.50
Public research	3,855.94	3.71	1.42	3.95	3.96	0.19
Private research	5,705.40	1.61	0.69	5.07	5.70	2.49
Public doctoral[2]	3,466.44	1.59	0.96	3.85	3.05	0.13
Private doctoral[2]	3,391.30	1.70	1.00	3.38	3.66	1.53
Public comprehensive	4,873.18	0.57	0.52	1.71	1.88	0.39
Private comprehensive	4,211.43	0.73	0.45	3.32	2.18	2.27
Private liberal arts	2,858.25	0.91	0.57	3.42	3.74	1.66
Public 2-year	9,467.70	0.28	0.23	1.38	1.38	0.76
Other[3]	2,979.29	1.12	0.85	3.02	4.85	3.96
1987						
All institutions[1]	13,428.77	0.46	0.48	1.53	2.00	1.65
Public research	2,771.77	2.45	2.25	5.20	5.89	2.32
Private research	2,884.28	1.67	1.08	6.38	10.11	6.40
Public doctoral[2]	1,593.29	1.31	1.25	4.79	5.26	0.70
Private doctoral[2]	4,200.42	1.23	5.40	8.75	10.25	1.77
Public comprehensive	4,894.27	1.72	0.44	3.95	4.91	1.91
Private comprehensive	2,737.53	0.80	1.11	3.89	4.60	2.49
Private liberal arts	3,418.34	1.67	0.48	6.26	5.93	3.77
Public 2-year	9,411.19	0.69	0.64	2.47	3.06	2.49
Other[3]	4,041.73	0.71	1.12	3.41	7.47	9.00

— Too few cases for a reliable estimate.

[1] All accredited, nonproprietary U.S. postsecondary institutions that grant a 2-year (A.A.) or higher degree and whose accreditation at the higher education level is recognized by the U.S. Department of Education.

[2] Includes institutions classified by the Carnegie Foundation as specialized medical schools.

[3] Public liberal arts, private 2-year, and religious and other specialized institutions, except medical.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey" and 1988 National Survey of Postsecondary Faculty, "Faculty Survey."

Table TA-2.6—Standard errors of number and percentage of part-time higher education instructional faculty and staff in 4-year institutions, by tenure status and program area: Fall 1987 and Fall 1992

Program area and year	Part-time instructional faculty and staff	Tenure status				
		Tenured	On tenure track	Not on tenure track	No tenure system for faculty status	No tenure system at institution
1992						
All program areas in 4-year institutions*	10,285.21	0.62	0.30	1.26	1.28	0.66
Agriculture/home economics	425.00	12.05	—	12.34	9.64	—
Business	1,993.88	1.12	1.23	4.95	3.32	3.22
Education	2,008.72	1.20	0.56	3.20	3.10	1.12
Engineering	1,215.01	3.83	2.46	5.86	5.69	2.16
Fine arts	1,930.78	1.76	0.94	3.63	3.22	2.79
Humanities	1,708.80	0.56	0.21	2.34	2.21	0.94
Natural sciences	2,055.67	2.04	0.75	3.75	4.42	1.55
Social sciences	1,934.47	0.83	1.20	3.38	3.14	1.64
All other fields	2,799.72	0.98	0.55	3.94	4.11	0.81
1987						
All program areas in 4-year institutions*	9,569.01	0.62	0.69	1.94	2.59	2.24
Agriculture/home economics	801.52	7.24	—	9.70	8.69	8.07
Business	2,623.00	3.23	—	5.55	8.76	8.87
Education	1,219.19	2.51	1.02	7.01	5.91	2.91
Engineering	995.26	3.71	2.77	7.34	8.87	6.17
Fine arts	2,868.38	0.48	1.15	4.26	6.20	6.77
Humanities	1,831.91	2.04	0.11	3.00	3.41	1.68
Natural sciences	2,889.61	1.12	1.46	4.89	6.26	3.68
Social sciences	1,912.53	1.92	0.61	8.16	8.75	7.70
All other fields	2,572.32	1.42	0.73	4.14	6.62	7.36

— Too few cases for a reliable estimate.

* Health sciences faculty are included in the program area total but are not shown separately. See Technical Notes for details.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey" and 1988 National Survey of Postsecondary Faculty, "Faculty Survey."

Table TA-2.7—Standard errors of number and percentage of part-time higher education instructional faculty and staff with a doctoral or professional degree, by type and control of institution: Fall 1987 and Fall 1992

Type and control of institution and year	Part-time instructional faculty and staff	Have doctoral or first professional degree	
		Yes	No
1992			
All institutions[1]	14,251.60	1.16	1.16
Public research	3,855.94	5.17	5.17
Private research	5,705.40	6.34	6.34
Public doctoral[2]	3,466.44	6.44	6.44
Private doctoral[2]	3,391.30	6.41	6.41
Public comprehensive	4,873.18	2.04	2.04
Private comprehensive	4,211.43	1.93	1.93
Private liberal arts	2,858.25	2.51	2.51
Public 2-year	9,467.70	0.82	0.82
Other[3]	2,979.29	6.11	6.11
1987			
All institutions[1]	13,428.77	1.93	1.93
Public research	2,771.77	7.02	7.02
Private research	2,884.28	8.48	8.48
Public doctoral[2]	1,593.29	5.96	5.96
Private doctoral[2]	4,200.42	11.12	11.12
Public comprehensive	4,894.27	3.77	3.77
Private comprehensive	2,737.53	4.13	4.13
Private liberal arts	3,418.34	5.00	5.00
Public 2-year	9,411.19	2.37	2.37
Other[3]	4,041.73	9.70	9.70

[1] All accredited, nonproprietary U.S. postsecondary institutions that grant a 2-year (A.A.) or higher degree and whose accreditation at the higher education level is recognized by the U.S. Department of Education.

[2] Includes institutions classified by the Carnegie Foundation as specialized medical schools.

[3] Public liberal arts, private 2-year, and religious and other specialized institutions, except medical.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey" and 1988 National Survey of Postsecondary Faculty, "Faculty Survey."

Table TA-2.8—Standard errors of number and percentage of part-time higher education instructional faculty and staff in 4-year institutions with a doctoral or professional degree, by program area: Fall 1987 and Fall 1992

Program area and year	Part-time instructional faculty and staff	Have doctoral or first professional degree	
		Yes	No
1992			
All program areas in 4-year institutions*	10,285.21	1.71	1.71
Agriculture/home economics	425.00	6.25	6.25
Business	1,993.88	3.49	3.49
Education	2,008.72	2.99	2.99
Engineering	1,215.01	8.24	8.24
Fine arts	1,930.78	1.54	1.54
Humanities	1,708.80	2.62	2.62
Natural sciences	2,055.67	4.36	4.36
Social sciences	1,934.47	4.01	4.01
All other fields	2,799.72	4.21	4.21
1987			
All program areas in 4-year institutions*	9,569.01	2.54	2.54
Agriculture/home economics	801.52	17.17	17.17
Business	2,623.00	8.68	8.68
Education	1,219.19	5.62	5.62
Engineering	995.26	6.58	6.58
Fine arts	2,868.38	4.25	4.25
Humanities	1,831.91	3.41	3.41
Natural sciences	2,889.61	5.92	5.92
Social sciences	1,912.53	6.89	6.89
All other fields	2,572.32	8.04	8.04

* Health sciences faculty are included in the program area total but are not shown separately. See Technical Notes for details.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey" and 1988 National Survey of Postsecondary Faculty, "Faculty Survey."

Table TA-2.9—Standard errors of average age and age distribution of part-time instructional faculty and staff, by type and control of institution: Fall 1987 and Fall 1992

Type and control of institution and year	Part-time instructional faculty and staff	Average age	Age distribution					
			Under 35	35-44	45-54	55-64	65-70	71 or older
1992								
All institutions[1]	14,251.60	0.22	0.65	0.83	0.66	0.61	0.41	0.25
Public research	3,855.94	0.87	2.31	3.72	4.36	2.45	2.20	1.68
Private research	5,705.40	1.66	4.65	5.94	4.81	6.05	0.72	1.53
Public doctoral[2]	3,466.44	1.13	2.93	3.16	1.99	2.68	3.18	1.39
Private doctoral[2]	3,391.30	0.96	2.52	4.25	3.60	2.13	2.15	0.88
Public comprehensive	4,873.18	0.64	2.39	2.19	1.51	1.24	0.97	0.40
Private comprehensive	4,211.43	0.56	1.31	1.74	1.55	1.32	1.24	0.66
Private liberal arts	2,858.25	0.55	1.67	2.80	1.69	1.79	1.13	0.60
Public 2-year	9,467.70	0.28	0.85	1.11	0.88	0.84	0.49	0.28
Other[3]	2,979.29	1.12	2.27	2.59	2.76	1.96	1.79	1.84
1987								
All institutions[1]	13,428.77	0.34	1.32	2.02	1.72	1.13	0.56	0.34
Public research	2,771.77	1.22	3.79	5.85	5.80	3.59	3.41	1.32
Private research	2,884.28	1.22	5.53	7.44	7.96	3.59	2.21	1.27
Public doctoral[2]	1,593.29	1.18	5.14	6.41	5.21	2.61	1.53	0.72
Private doctoral[2]	4,200.42	1.48	4.80	7.65	8.43	4.19	0.34	1.14
Public comprehensive	4,894.27	0.80	2.06	3.45	2.84	2.77	0.38	1.27
Private comprehensive	2,737.53	0.90	3.57	3.44	4.19	2.64	2.30	1.18
Private liberal arts	3,418.34	2.03	3.93	5.87	2.78	5.54	2.38	2.53
Public 2-year	9,411.19	0.49	2.46	3.97	3.17	2.00	0.96	0.21
Other[3]	4,041.73	1.27	4.86	6.43	5.79	3.25	0.80	1.66

[1] All accredited, nonproprietary U.S. postsecondary institutions that grant a 2-year (A.A.) or higher degree and whose accreditation at the higher education level is recognized by the U.S. Department of Education.

[2] Includes institutions classified by the Carnegie Foundation as specialized medical schools.

[3] Public liberal arts, private 2-year, and religious and other specialized institutions, except medical.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey" and 1988 National Survey of Postsecondary Faculty, "Faculty Survey."

Table TA-2.10—Standard errors of average age and age distribution of part-time instructional faculty and staff in 4-year institutions, by program area: Fall 1987 and Fall 1992

Program area and year	Part-time instructional faculty and staff	Average age	Age distribution					
			Under 35	35-44	45-54	55-64	65-70	71 or older
1992								
All program areas in 4-year institutions*	10,285.21	0.32	0.99	1.25	1.00	0.88	0.56	0.38
Agriculture/home economics	425.00	3.61	11.28	12.93	5.94	13.16	—	4.85
Business	1,993.88	0.87	2.04	4.68	4.47	2.48	1.75	1.24
Education	2,008.72	0.82	1.15	3.61	3.01	2.26	2.00	1.17
Engineering	1,215.01	2.12	5.69	6.07	6.34	3.95	3.31	3.29
Fine arts	1,930.78	0.92	2.49	3.16	3.47	2.20	0.94	1.55
Humanities	1,708.80	0.63	2.29	2.05	2.14	1.75	0.91	0.90
Natural sciences	2,055.67	0.87	2.64	2.86	3.15	3.60	1.67	0.46
Social sciences	1,934.47	0.88	3.19	3.52	3.28	2.36	1.22	0.89
All other fields	2,799.72	0.57	1.87	2.97	2.60	1.82	0.67	0.80
1987								
All program areas in 4-year institutions*	9,569.01	0.47	1.47	1.97	1.87	1.33	0.68	0.55
Agriculture/home economics	801.52	1.92	0.66	10.01	12.74	5.99	6.55	—
Business	2,623.00	1.14	3.22	8.21	7.17	4.62	3.77	—
Education	1,219.19	1.26	1.83	6.80	4.86	4.15	3.34	0.42
Engineering	995.26	1.85	6.90	8.62	9.10	5.44	3.08	—
Fine arts	2,868.38	1.23	3.69	5.86	6.46	3.05	0.70	2.10
Humanities	1,831.91	0.98	3.34	3.23	3.11	2.32	0.78	2.27
Natural sciences	2,889.61	1.29	3.32	6.77	5.60	3.58	2.15	2.18
Social sciences	1,912.53	1.45	5.75	7.20	4.50	4.49	2.52	0.78
All other fields	2,572.32	1.69	4.83	7.36	5.33	3.95	2.47	0.47

— Too few cases for a reliable estimate.

* Health sciences faculty are included in the program area total but are not shown separately. See Technical Notes for details.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey" and 1988 National Survey of Postsecondary Faculty, "Faculty Survey."

Table TA-2.11—Standard errors of number and percentage of part-time higher education instructional faculty and staff, by sex and type and control of institution: Fall 1987 and Fall 1992

Type and control of institution and year	Part-time instructional faculty and staff	Sex	
		Male	Female
1992			
All institutions[1]	14,251.60	0.84	0.84
Public research	3,855.94	4.32	4.32
Private research	5,705.40	4.35	4.35
Public doctoral[2]	3,466.44	4.44	4.44
Private doctoral[2]	3,391.30	2.88	2.88
Public comprehensive	4,873.18	2.20	2.20
Private comprehensive	4,211.43	2.21	2.21
Private liberal arts	2,858.25	2.79	2.79
Public 2-year	9,467.70	1.21	1.21
Other[3]	2,979.29	3.77	3.77
1987			
All institutions[1]	13,428.77	2.00	2.00
Public research	2,771.77	5.23	5.23
Private research	2,884.28	11.08	11.08
Public doctoral[2]	1,593.29	5.79	5.79
Private doctoral[2]	4,200.42	11.17	11.17
Public comprehensive	4,894.27	2.82	2.82
Private comprehensive	2,737.53	4.29	4.29
Private liberal arts	3,418.34	9.48	9.48
Public 2-year	9,411.19	3.29	3.29
Other[3]	4,041.73	6.97	6.97

[1] All accredited, nonproprietary U.S. postsecondary institutions that grant a 2-year (A.A.) or higher degree and whose accreditation at the higher education level is recognized by the U.S. Department of Education.

[2] Includes institutions classified by the Carnegie Foundation as specialized medical schools.

[3] Public liberal arts, private 2-year, and religious and other specialized institutions, except medical.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey" and 1988 National Survey of Postsecondary Faculty, "Faculty Survey."

Table TA-2.12—Standard errors of number and percentage of part-time higher education instructional faculty and staff in 4-year institutions, by sex and program area: Fall 1987 and Fall 1992

Program area and year	Part-time instructional faculty and staff	Sex	
		Male	Female
1992			
All program areas in 4-year institutions*	10,285.21	1.17	1.17
Agriculture/home economics	425.00	16.84	16.84
Business	1,993.88	3.73	3.73
Education	2,008.72	3.13	3.13
Engineering	1,215.01	1.90	1.90
Fine arts	1,930.78	3.26	3.26
Humanities	1,708.80	2.58	2.58
Natural sciences	2,055.67	3.01	3.01
Social sciences	1,934.47	4.23	4.23
All other fields	2,799.72	2.51	2.51
1987			
All program areas in 4-year institutions*	9,569.01	2.52	2.52
Agriculture/home economics	801.52	12.58	12.58
Business	2,623.00	8.82	8.82
Education	1,219.19	5.96	5.96
Engineering	995.26	2.22	2.22
Fine arts	2,868.38	6.68	6.68
Humanities	1,831.91	3.32	3.32
Natural sciences	2,889.61	6.09	6.09
Social sciences	1,912.53	8.64	8.64
All other fields	2,572.32	7.68	7.68

* Health sciences faculty are included in the program area total but are not shown separately. See Technical Notes for details.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey" and 1988 National Survey of Postsecondary Faculty, "Faculty Survey."

Table TA-2.13—Standard errors of number and percentage of part-time higher education instructional faculty and staff, by race/ethnicity and type and control of institution: Fall 1987 and Fall 1992

		Race/ethnicity				
Type and control of institution and year	Part-time instructional faculty and staff	American Indian/ Alaskan Native	Asian/ Pacific Islander	Black, non-Hispanic	Hispanic	White, non-Hispanic
1992						
All institutions[1]	14,251.60	0.11	0.31	0.38	0.36	0.61
Public research	3,855.94	—	2.38	0.88	1.06	2.53
Private research	5,705.40	0.42	1.42	2.33	1.27	2.85
Public doctoral[2]	3,466.44	0.31	1.13	0.61	0.55	1.47
Private doctoral[2]	3,391.30	0.20	1.49	3.00	0.74	3.89
Public comprehensive	4,873.18	0.33	0.94	1.47	0.99	2.13
Private comprehensive	4,211.43	0.31	0.84	1.53	0.29	1.89
Private liberal arts	2,858.25	0.12	0.48	2.05	0.90	2.39
Public 2-year	9,467.70	0.20	0.38	0.44	0.70	0.88
Other[3]	2,979.29	0.58	1.19	1.13	0.63	1.57
1987						
All institutions[1]	13,428.77	0.35	0.72	0.74	0.54	1.16
Public research	2,771.77	0.73	0.97	0.36	—	1.24
Private research	2,884.28	1.03	1.23	6.26	1.30	5.58
Public doctoral[2]	1,593.29	0.70	—	0.70	0.99	1.32
Private doctoral[2]	4,200.42	0.72	7.29	—	4.45	8.13
Public comprehensive	4,894.27	2.04	1.94	1.01	0.41	2.75
Private comprehensive	2,737.53	—	1.50	0.66	0.94	1.83
Private liberal arts	3,418.34	1.06	0.14	7.05	1.83	6.94
Public 2-year	9,411.19	0.44	0.76	0.79	1.07	1.61
Other[3]	4,041.73	0.44	4.15	2.44	—	4.82

— Too few cases for a reliable estimate.

[1] All accredited, nonproprietary U.S. postsecondary institutions that grant a 2-year (A.A.) or higher degree and whose accreditation at the higher education level is recognized by the U.S. Department of Education.

[2] Includes institutions classified by the Carnegie Foundation as specialized medical schools.

[3] Public liberal arts, private 2-year, and religious and other specialized institutions, except medical.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey" and 1988 National Survey of Postsecondary Faculty, "Faculty Survey."

Table TA-2.14—Standard errors of number and percentage of part-time higher education instructional faculty and staff in 4-year institutions, by race/ethnicity and program area: Fall 1987 and Fall 1992

Program area and year	Part-time instructional faculty and staff	Race/ethnicity: American Indian/ Alaskan Native	Race/ethnicity: Asian/ Pacific Islander	Race/ethnicity: Black, non-Hispanic	Race/ethnicity: Hispanic	Race/ethnicity: White, non-Hispanic
1992						
All program areas in 4-year institutions*	10,285.21	0.11	0.48	0.62	0.34	0.86
Agriculture/home economics	425.00	—	—	—	2.44	2.44
Business	1,993.88	0.33	0.76	1.31	1.36	2.11
Education	2,008.72	0.45	0.44	1.35	0.50	1.61
Engineering	1,215.01	—	4.01	1.05	1.71	4.48
Fine arts	1,930.78	0.46	1.15	0.99	0.75	1.68
Humanities	1,708.80	0.08	0.62	0.86	0.90	1.39
Natural sciences	2,055.67	0.57	2.11	1.06	0.83	2.38
Social sciences	1,934.47	0.45	1.14	1.46	0.93	2.16
All other fields	2,799.72	0.12	0.70	1.32	0.61	1.58
1987						
All program areas in 4-year institutions*	9,569.01	0.51	1.11	1.14	0.54	1.63
Agriculture/home economics	801.52	—	—	—	—	0.00
Business	2,623.00	—	0.60	1.21	0.63	1.52
Education	1,219.19	1.35	0.70	1.72	1.26	2.67
Engineering	995.26	0.42	2.53	—	2.53	3.60
Fine arts	2,868.38	0.48	1.76	2.51	1.34	3.27
Humanities	1,831.91	0.84	0.78	0.94	0.82	1.66
Natural sciences	2,889.61	0.29	2.28	0.98	0.70	2.56
Social sciences	1,912.53	6.37	7.77	1.36	0.43	8.94
All other fields	2,572.32	0.47	1.01	0.82	0.73	1.58

— Too few cases for a reliable estimate.

* Health sciences faculty are included in the program area total but are not shown separately. See Technical Notes for details.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey" and 1988 National Survey of Postsecondary Faculty, "Faculty Survey."

Table TA-2.15—Standard errors of number and percentage of part-time higher education instructional faculty and staff, by U.S. citizenship status and type and control of institution: Fall 1987 and Fall 1992

Type and control of institution and year	Part-time instructional faculty and staff	Citizenship status	
		Citizen	Non-citizen
1992			
All institutions[1]	14,251.60	0.37	0.37
Public research	3,855.94	1.95	1.95
Private research	5,705.40	3.62	3.62
Public doctoral[2]	3,466.44	0.97	0.97
Private doctoral[2]	3,391.30	1.66	1.66
Public comprehensive	4,873.18	1.30	1.30
Private comprehensive	4,211.43	0.69	0.69
Private liberal arts	2,858.25	1.13	1.13
Public 2-year	9,467.70	0.34	0.34
Other[3]	2,979.29	1.35	1.35
1987			
All institutions[1]	13,428.77	0.58	0.58
Public research	2,771.77	1.51	1.51
Private research	2,884.28	2.75	2.75
Public doctoral[2]	1,593.29	0.58	0.58
Private doctoral[2]	4,200.42	5.92	5.92
Public comprehensive	4,894.27	1.23	1.23
Private comprehensive	2,737.53	1.37	1.37
Private liberal arts	3,418.34	0.40	0.40
Public 2-year	9,411.19	0.92	0.92
Other[3]	4,041.73	0.74	0.74

[1] All accredited, nonproprietary U.S. postsecondary institutions that grant a 2-year (A.A.) or higher degree and whose accreditation at the higher education level is recognized by the U.S. Department of Education.

[2] Includes institutions classified by the Carnegie Foundation as specialized medical schools.

[3] Public liberal arts, private 2-year, and religious and other specialized institutions, except medical.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey" and 1988 National Survey of Postsecondary Faculty, "Faculty Survey."

Table TA-2.16—Standard errors of number and percentage of part-time higher education instructional faculty and staff in 4-year institutions, by U.S. citizenship status and program area: Fall 1987 and Fall 1992

Program area and year	Part-time instructional faculty and staff	Citizenship status	
		Citizen	Non-citizen
1992			
All program areas in 4-year institutions*	10,285.21	0.62	0.62
Agriculture/home economics	425.00	0.00	0.00
Business	1,993.88	1.16	1.16
Education	2,008.72	0.58	0.58
Engineering	1,215.01	5.70	5.70
Fine arts	1,930.78	0.82	0.82
Humanities	1,708.80	1.36	1.36
Natural sciences	2,055.67	1.96	1.96
Social sciences	1,934.47	1.70	1.70
All other fields	2,799.72	1.26	1.26
1987			
All program areas in 4-year institutions*	9,569.01	0.75	0.75
Agriculture/home economics	801.52	—	—
Business	2,623.00	0.03	0.03
Education	1,219.19	1.26	1.26
Engineering	995.26	6.32	6.32
Fine arts	2,868.38	0.94	0.94
Humanities	1,831.91	1.48	1.48
Natural sciences	2,889.61	1.60	1.60
Social sciences	1,912.53	3.44	3.44
All other fields	2,572.32	0.60	0.60

— Too few cases for a reliable estimate.

* Health sciences faculty are included in the program area total but are not shown separately. See Technical Notes for details.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey" and 1988 National Survey of Postsecondary Faculty, "Faculty Survey."

Table TA-3.1—Standard errors of mean number of hours worked by part-time instructional faculty and staff, by type and control of institution: Fall 1987 and Fall 1992

Type and control of institution and year	Part-time instructional faculty and staff	Mean hours worked per week
1992		
All institutions[1]	14,251.60	0.41
Public research	3,855.94	1.47
Private research	5,705.40	2.16
Public doctoral[2]	3,466.44	2.47
Private doctoral[2]	3,391.30	2.44
Public comprehensive	4,873.18	1.27
Private comprehensive	4,211.43	0.95
Private liberal arts	2,858.25	1.12
Public 2-year	9,467.70	0.52
Other[3]	2,979.29	1.97
1987		
All institutions[1]	13,428.77	0.81
Public research	2,771.77	2.62
Private research	2,884.28	2.98
Public doctoral[2]	1,593.29	2.30
Private doctoral[2]	4,200.42	3.69
Public comprehensive	4,894.27	1.10
Private comprehensive	2,737.53	1.68
Private liberal arts	3,418.34	2.72
Public 2-year	9,411.19	1.30
Other[3]	4,041.73	2.57

[1] All accredited, nonproprietary U.S. postsecondary institutions that grant a 2-year (A.A.) or higher degree and whose accreditation at the higher education level is recognized by the U.S. Department of Education.

[2] Includes institutions classified by the Carnegie Foundation as specialized medical schools.

[3] Public liberal arts, private 2-year, and religious and other specialized institutions, except medical.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey" and 1988 National Survey of Postsecondary Faculty, "Faculty Survey."

Table TA-3.2—Standard errors of mean number of hours worked by part-time instructional faculty and staff in 4-year institutions, by program area: Fall 1987 and Fall 1992

Program area and year	Part-time instructional faculty and staff	Mean hours worked per week
1992		
All program areas in 4-year institutions*	10,285.21	0.59
Agriculture/home economics	425.00	6.01
Business	1,993.88	1.83
Education	2,008.72	1.41
Engineering	1,215.01	2.63
Fine arts	1,930.78	1.63
Humanities	1,708.80	1.04
Natural sciences	2,055.67	1.42
Social sciences	1,934.47	1.61
All other fields	2,799.72	1.61
1987		
All program areas in 4-year institutions*	9,569.01	0.96
Agriculture/home economics	801.52	5.62
Business	2,623.00	1.86
Education	1,219.19	2.66
Engineering	995.26	3.14
Fine arts	2,868.38	2.30
Humanities	1,831.91	1.32
Natural sciences	2,889.61	2.90
Social sciences	1,912.53	1.87
All other fields	2,572.32	2.87

* Health sciences faculty are included in the program area total but are not shown separately. See Technical Notes for details.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey" and 1988 National Survey of Postsecondary Faculty, "Faculty Survey."

Table TA-3.3—Standard errors of percentage distribution of part-time instructional faculty and staff, by time allocation and type and control of institution: Fall 1987 and Fall 1992

Type and control of institution and year	Part-time instructional faculty and staff	Percentage of time spent on			
		Teaching activities	Research activites	Administrative activities	Other activities
1992					
All institutions[1]	14,251.60	0.76	0.39	0.30	0.56
Public research	3,855.94	3.40	2.51	1.10	2.94
Private research	5,705.40	4.70	2.84	2.64	4.60
Public doctoral[2]	3,466.44	3.72	1.44	1.19	2.31
Private doctoral[2]	3,391.30	4.15	1.14	0.73	4.33
Public comprehensive	4,873.18	1.45	1.17	0.78	1.15
Private comprehensive	4,211.43	1.74	0.56	0.63	1.52
Private liberal arts	2,858.25	2.26	0.95	0.86	1.64
Public 2-year	9,467.70	0.76	0.27	0.32	0.62
Other[3]	2,979.29	2.57	1.46	0.87	1.68
1987					
All institutions[1]	13,428.77	1.28	0.45	0.35	1.30
Public research	2,771.77	4.74	1.83	1.26	5.31
Private research	2,884.28	3.67	3.67	3.72	7.39
Public doctoral[2]	1,593.29	4.68	2.04	1.25	4.74
Private doctoral[2]	4,200.42	4.96	4.45	1.36	6.61
Public comprehensive	4,894.27	2.51	0.90	1.11	2.72
Private comprehensive	2,737.53	3.12	1.27	0.99	2.61
Private liberal arts	3,418.34	3.01	1.22	0.68	2.99
Public 2-year	9,411.19	2.04	0.35	0.46	1.98
Other[3]	4,041.73	3.67	1.18	0.82	4.47

[1] All accredited, nonproprietary U.S. postsecondary institutions that grant a 2-year (A.A.) or higher degree and whose accreditation at the higher education level is recognized by the U.S. Department of Education.

[2] Includes institutions classified by the Carnegie Foundation as specialized medical schools.

[3] Public liberal arts, private 2-year, and religious and other specialized institutions, except medical.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey" and 1988 National Survey of Postsecondary Faculty, "Faculty Survey."

Table TA-3.4—Standard errors of percentage distribution of part-time instructional faculty and staff in 4-year institutions, by time allocation and program area: Fall 1987 and Fall 1992

Type and control of institution and year	Part-time instructional faculty and staff	Percentage of time spent on			
		Teaching activities	Research activites	Administrative activities	Other activities
1992					
All program areas in 4-year institutions*	10,285.21	1.18	0.65	0.49	0.91
Agriculture/home economics	425.00	9.92	1.56	3.93	9.96
Business	1,993.88	3.17	0.89	1.35	2.90
Education	2,008.72	2.04	0.45	1.68	1.33
Engineering	1,215.01	4.90	4.49	2.71	4.91
Fine arts	1,930.78	2.42	0.93	1.14	1.89
Humanities	1,708.80	1.43	0.84	0.51	0.96
Natural sciences	2,055.67	3.05	3.35	0.86	2.13
Social sciences	1,934.47	2.38	1.62	1.15	2.17
All other fields	2,799.72	2.66	0.99	0.81	2.38
1987					
All program areas in 4-year institutions*	9,569.01	1.48	0.70	0.50	1.67
Agriculture/home economics	801.52	9.43	3.69	1.02	10.71
Business	2,623.00	4.08	0.43	1.32	4.36
Education	1,219.19	3.66	0.72	1.63	2.84
Engineering	995.26	7.79	2.68	1.80	7.50
Fine arts	2,868.38	2.81	1.69	0.52	3.50
Humanities	1,831.91	1.67	0.59	0.49	1.59
Natural sciences	2,889.61	4.18	3.00	2.41	3.92
Social sciences	1,912.53	5.83	1.90	1.71	6.38
All other fields	2,572.32	3.78	1.24	0.52	3.98

* Health sciences faculty are included in the program area total but are not shown separately. See Technical Notes for details.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey" and 1988 National Survey of Postsecondary Faculty, "Faculty Survey."

Table TA-3.5—Standard errors of mean number of classroom hours and student contact hours of part-time instructional faculty and staff, by type and control of institution: Fall 1987 and Fall 1992

Type and control of institution and year	Part-time instructional faculty and staff	Mean classroom hours	Mean student contact hours[1]
1992			
All institutions[2]	14,251.60	0.19	5.72
Public research	3,855.94	0.92	26.89
Private research	5,705.40	0.33	4.94
Public doctoral[3]	3,466.44	0.55	34.19
Private doctoral[3]	3,391.30	0.85	40.28
Public comprehensive	4,873.18	0.32	20.20
Private comprehensive	4,211.43	1.28	27.30
Private liberal arts	2,858.25	0.28	7.27
Public 2-year	9,467.70	0.21	5.85
Other[4]	2,979.29	0.56	15.26
1987			
All institutions[2]	13,428.77	0.18	4.83
Public research	2,771.77	0.53	32.45
Private research	2,884.28	0.74	20.97
Public doctoral[3]	1,593.29	0.98	33.89
Private doctoral[3]	4,200.42	0.52	12.11
Public comprehensive	4,894.27	0.35	10.44
Private comprehensive	2,737.53	0.35	6.95
Private liberal arts	3,418.34	0.68	6.64
Public 2-year	9,411.19	0.31	6.04
Other[4]	4,041.73	0.69	26.33

[1] Number of hours per week spent teaching classes, multiplied by the number of students in those classes.

[2] All accredited, nonproprietary U.S. postsecondary institutions that grant a 2-year (A.A.) or higher degree and whose accreditation at the higher education level is recognized by the U.S. Department of Education.

[3] Includes institutions classified by the Carnegie Foundation as specialized medical schools.

[4] Public liberal arts, private 2-year, and religious and other specialized institutions, except medical.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey" and 1988 National Survey of Postsecondary Faculty, "Faculty Survey."

Table TA-3.6—Standard errors of mean number of classroom hours and student contact hours of part-time instructional faculty and staff in 4-year institutions, by program area: Fall 1987 and Fall 1992

Program area and year	Part-time instructional faculty and staff	Mean classroom hours	Mean student contact hours[1]
1992			
All program areas in 4-year institutions[2]	10,285.21	0.32	9.85
Agriculture/home economics	425.00	1.60	58.46
Business	1,993.88	0.94	22.38
Education	2,008.72	0.56	12.17
Engineering	1,215.01	0.71	38.75
Fine arts	1,930.78	0.31	15.04
Humanities	1,708.80	0.56	13.38
Natural sciences	2,055.67	0.35	11.48
Social sciences	1,934.47	0.43	15.88
All other fields	2,799.72	0.35	15.17
1987			
All program areas in 4-year institutions[2]	9,569.01	0.21	7.13
Agriculture/home economics	801.52	0.63	42.45
Business	2,623.00	0.95	22.57
Education	1,219.19	0.56	11.24
Engineering	995.26	0.53	18.03
Fine arts	2,868.38	0.50	11.57
Humanities	1,831.91	0.27	9.62
Natural sciences	2,889.61	0.43	20.44
Social sciences	1,912.53	0.54	26.00
All other fields	2,572.32	0.43	14.13

[1] Number of hours per week spent teaching classes, multiplied by the number of students in those classes.

[2] Health sciences faculty are included in the program area total but are not shown separately. See Technical Notes for details.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey" and 1988 National Survey of Postsecondary Faculty, "Faculty Survey."

Table TA-3.7—Standard errors of mean number of publications and presentations in the past two years by part-time instructional faculty and staff, by type and control of institution: Fall 1987 and Fall 1992

Type and control of institution and year	Part-time instructional faculty and staff	Refereed or juried publications	Reviews and non-refereed publications	Books and book chapters	Monographs and technical reports	Presentations and exhibits	Patents, copyrights, and software
1992							
All institutions[1]	14,251.60	0.04	0.09	0.01	0.10	0.26	0.02
Public research	3,855.94	0.21	0.75	0.08	0.13	0.92	0.06
Private research	5,705.40	0.37	1.13	0.11	1.32	1.24	0.02
Public doctoral[2]	3,466.44	0.16	0.20	0.05	0.19	1.61	0.07
Private doctoral[2]	3,391.30	0.31	0.20	0.08	0.27	0.68	0.02
Public comprehensive	4,873.18	0.07	0.14	0.02	0.25	0.96	0.03
Private comprehensive	4,211.43	0.10	0.17	0.03	0.37	1.01	0.05
Private liberal arts	2,858.25	0.15	0.26	0.03	0.18	1.06	0.07
Public 2-year	9,467.70	0.03	0.08	0.01	0.10	0.31	0.03
Other[3]	2,979.29	0.19	0.23	0.10	0.35	0.90	0.05
1987							
All institutions[1]	13,428.77	0.07	0.65	0.04	0.34	0.47	0.32
Public research	2,771.77	0.51	0.73	0.12	0.73	0.77	0.05
Private research	2,884.28	0.44	6.34	0.23	0.53	4.58	0.10
Public doctoral[2]	1,593.29	0.24	0.74	0.10	5.48	3.33	0.05
Private doctoral[2]	4,200.42	0.28	0.98	0.18	0.59	1.39	0.22
Public comprehensive	4,894.27	0.15	0.23	0.04	0.20	1.53	0.16
Private comprehensive	2,737.53	0.13	0.17	0.10	0.58	0.56	0.04
Private liberal arts	3,418.34	0.21	7.62	0.04	2.68	1.59	0.01
Public 2-year	9,411.19	0.11	0.43	0.07	0.23	0.69	0.05
Other[3]	4,041.73	0.16	2.87	0.05	0.86	1.54	3.37

[1] All accredited, nonproprietary U.S. postsecondary institutions that grant a 2-year (A.A.) or higher degree and whose accreditation at the higher education level is recognized by the U.S. Department of Education.

[2] Includes institutions classified by the Carnegie Foundation as specialized medical schools.

[3] Public liberal arts, private 2-year, and religious and other specialized institutions, except medical.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey" and 1988 National Survey of Postsecondary Faculty, "Faculty Survey."

Table TA-3.8—Standard errors of mean number of publications and presentations in the past two years by part-time instructional faculty and staff in 4-year institutions, by program area: Fall 1987 and Fall 1992

Program area and year	Part-time instructional faculty and staff	Refereed or juried publications	Reviews and non-refereed publications	Books and book chapters	Monographs and technical reports	Presentations and exhibits	Patents, copyrights, and software
1992							
All program areas in 4-year institutions*	10,285.21	0.07	0.15	0.02	0.17	0.41	0.02
Agriculture/home economics	425.00	0.12	0.07	—	0.21	0.89	—
Business	1,993.88	0.12	0.27	0.04	0.45	0.90	0.06
Education	2,008.72	0.08	0.25	0.05	0.16	0.57	0.03
Engineering	1,215.01	0.45	0.36	0.14	0.38	0.34	0.05
Fine arts	1,930.78	0.25	0.43	0.02	0.55	2.95	0.12
Humanities	1,708.80	0.17	0.23	0.06	0.08	0.29	0.04
Natural sciences	2,055.67	0.15	0.18	0.06	0.40	0.81	0.06
Social sciences	1,934.47	0.28	0.37	0.08	0.11	0.35	0.03
All other fields	2,799.72	0.12	0.65	0.06	0.50	0.52	0.03
1987							
All program areas in 4-year institutions*	9,569.01	0.09	1.07	0.04	0.56	0.66	0.54
Agriculture/home economics	801.52	0.39	3.92	0.71	0.02	0.36	—
Business	2,623.00	0.06	6.80	0.06	0.52	0.52	0.04
Education	1,219.19	0.07	0.38	0.26	0.28	0.68	0.49
Engineering	995.26	0.20	0.24	0.05	0.39	0.86	0.28
Fine arts	2,868.38	0.23	0.65	0.04	0.25	3.32	3.65
Humanities	1,831.91	0.17	0.69	0.07	0.29	0.57	0.06
Natural sciences	2,889.61	0.27	0.37	0.11	0.50	2.63	0.15
Social sciences	1,912.53	0.15	0.60	0.09	1.53	0.51	0.03
All other fields	2,572.32	0.13	7.26	0.05	3.82	0.89	0.06

— Too few cases for a reliable estimate.

* Health sciences faculty are included in the program area total but are not shown separately. See Technical Notes for details.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey" and 1988 National Survey of Postsecondary Faculty, "Faculty Survey."

Table TA-3.9—Standard errors of percentage distribution of part-time instructional faculty and staff, by satisfaction with work load and type and control of institution: Fall 1987 and Fall 1992

Type and control of institution and year	Part-time instructional faculty and staff	Satisfaction with work load: Dissatisfied[1]	Satisfaction with work load: Somewhat satisfied	Satisfaction with work load: Very satisfied
1992				
All institutions[2]	14,251.60	0.60	0.80	0.89
Public research	3,855.94	2.72	4.52	5.00
Private research	5,705.40	4.19	4.53	2.74
Public doctoral[3]	3,466.44	2.38	2.85	2.46
Private doctoral[3]	3,391.30	1.66	5.26	6.18
Public comprehensive	4,873.18	1.55	1.92	2.08
Private comprehensive	4,211.43	1.39	2.00	2.06
Private liberal arts	2,858.25	1.81	2.51	2.51
Public 2-year	9,467.70	0.89	1.01	1.22
Other[4]	2,979.29	2.07	2.96	3.79
1987				
All institutions[2]	13,428.77	1.38	1.84	2.03
Public research	2,771.77	2.71	3.65	4.68
Private research	2,884.28	2.97	7.38	6.88
Public doctoral[3]	1,593.29	3.60	6.77	5.74
Private doctoral[3]	4,200.42	6.07	9.11	10.36
Public comprehensive	4,894.27	2.43	3.99	4.65
Private comprehensive	2,737.53	2.82	3.50	3.15
Private liberal arts	3,418.34	3.79	5.32	7.11
Public 2-year	9,411.19	2.32	3.51	3.67
Other[4]	4,041.73	7.09	5.24	7.27

[1] Percentage who said "very dissatisfied" or "somewhat dissatisfied."

[2] All accredited, nonproprietary U.S. postsecondary institutions that grant a 2-year (A.A.) or higher degree and whose accreditation at the higher education level is recognized by the U.S. Department of Education.

[3] Includes institutions classified by the Carnegie Foundation as specialized medical schools.

[4] Public liberal arts, private 2-year, and religious and other specialized institutions, except medical.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey" and 1988 National Survey of Postsecondary Faculty, "Faculty Survey."

Table TA-3.10—Standard errors of percentage distribution of part-time instructional faculty and staff in 4-year institutions, by satisfaction with work load and program area: Fall 1987 and Fall 1992

Program area and year	Part-time instructional faculty and staff	Satisfaction with work load		
		Dissatisfied[1]	Somewhat satisfied	Very satisfied
1992				
All program areas in 4-year institutions[2]	10,285.21	0.80	1.22	1.26
Agriculture/home economics	425.00	9.46	9.48	12.03
Business	1,993.88	2.83	4.16	4.21
Education	2,008.72	1.96	2.91	3.14
Engineering	1,215.01	1.57	6.73	6.78
Fine arts	1,930.78	2.69	3.35	3.20
Humanities	1,708.80	1.93	2.61	2.44
Natural sciences	2,055.67	2.32	4.23	3.89
Social sciences	1,934.47	2.17	2.85	3.37
All other fields	2,799.72	1.69	2.86	3.17
1987				
All program areas in 4-year institutions[2]	9,569.01	1.72	2.02	2.35
Agriculture/home economics	801.52	7.93	12.71	18.42
Business	2,623.00	9.37	5.78	7.79
Education	1,219.19	2.81	4.65	5.45
Engineering	995.26	2.64	9.81	9.60
Fine arts	2,868.38	3.99	3.34	5.10
Humanities	1,831.91	2.78	2.97	3.41
Natural sciences	2,889.61	2.69	5.97	5.92
Social sciences	1,912.53	8.37	7.40	6.26
All other fields	2,572.32	7.81	5.74	7.83

[1] Percentage who said "very dissatisfied" or "somewhat dissatisfied."

[2] Health sciences faculty are included in the program area total but are not shown separately. See Technical Notes for details.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey" and 1988 National Survey of Postsecondary Faculty, "Faculty Survey."

Table TA-3.11—Standard errors of percentage distribution of part-time instructional faculty and staff, by perception of pressure to increase work load in recent years and type and control of institution: Fall 1992

Type and control of institution and year	Part-time instructional faculty and staff	Worsened	Stayed the same	Improved	Don't know
1992					
All institutions[1]	14,251.60	0.90	0.80	0.39	0.94
Public research	3,855.94	4.10	4.06	1.75	3.30
Private research	5,705.40	4.85	4.00	2.19	4.99
Public doctoral[2]	3,466.44	3.47	2.41	1.50	2.99
Private doctoral[2]	3,391.30	3.66	4.57	1.87	5.27
Public comprehensive	4,873.18	2.20	2.02	0.94	2.55
Private comprehensive	4,211.43	1.79	2.07	1.02	2.27
Private liberal arts	2,858.25	2.39	2.66	1.31	2.56
Public 2-year	9,467.70	1.36	1.06	0.55	1.41
Other[3]	2,979.29	3.53	2.50	2.16	2.83

[1] All accredited, nonproprietary U.S. postsecondary institutions that grant a 2-year (A.A.) or higher degree and whose accreditation at the higher education level is recognized by the U.S. Department of Education.

[2] Includes institutions classified by the Carnegie Foundation as specialized medical schools.

[3] Public liberal arts, private 2-year, and religious and other specialized institutions, except medical.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey."

Table TA-3.12—Standard errors of percentage distribution of part-time instructional faculty and staff in 4-year institutions, by perception of pressure to increase work load in recent years and program area: Fall 1992

Program area and year	Part-time instructional faculty and staff	Worsened	Stayed the same	Improved	Don't know
1992					
All program areas in 4-year institutions*	10,285.21	1.18	1.24	0.56	1.23
Agriculture/home economics	425.00	11.66	12.63	9.03	10.86
Business	1,993.88	3.53	4.17	1.55	3.94
Education	2,008.72	2.66	2.59	2.01	3.30
Engineering	1,215.01	6.00	6.44	1.51	6.13
Fine arts	1,930.78	2.89	3.58	1.33	2.82
Humanities	1,708.80	2.69	2.44	0.97	2.30
Natural sciences	2,055.67	3.63	2.93	1.78	3.00
Social sciences	1,934.47	3.69	3.17	2.49	3.12
All other fields	2,799.72	2.38	3.13	1.34	3.25

* Health sciences faculty are included in the program area total but are not shown separately. See Technical Notes for details.

SOURCE: U.S. Department of Education, National Center for Education Statistics, "1993 National Study of Postsecondary Faculty."

Table TA-4.1—Standard errors of mean income of part-time instructional faculty and staff, by source of income and type and control of institution: Fall 1987 and Fall 1992

Type and control of institution and year	Part-time instructional faculty and staff	Total earned income	Source of income: Basic salary from institution	Source of income: Other income from institution	Source of income: Outside consulting income	Source of income: Other outside income
1992						
All institutions[1]	14,251.60	1,375.33	486.74	212.47	338.07	1,238.42
Public research	3,855.94	6,580.46	2,363.27	362.00	734.01	6,926.90
Private research	5,705.40	8,064.35	2,178.20	499.42	1,815.90	8,046.06
Public doctoral[2]	3,466.44	5,595.60	1,605.62	214.49	548.06	6,226.43
Private doctoral[2]	3,391.30	10,687.67	4,695.15	158.13	3,422.00	10,763.34
Public comprehensive	4,873.18	2,426.90	1,717.44	363.01	1,290.89	1,640.96
Private comprehensive	4,211.43	2,867.94	724.15	127.29	1,478.01	2,781.96
Private liberal arts	2,858.25	4,840.87	1,999.51	77.61	401.47	4,484.52
Public 2-year	9,467.70	1,454.97	524.92	125.37	266.11	1,230.19
Other[3]	2,979.29	8,257.85	1,541.54	3,034.44	1,785.18	6,032.04
1987						
All institutions[1]	13,428.77	1,573.49	371.28	65.24	624.00	1,505.95
Public research	2,771.77	4,010.20	1,721.92	214.04	615.23	4,712.87
Private research	2,884.28	13,122.53	1,933.58	164.25	1,258.02	14,117.88
Public doctoral[2]	1,593.29	4,563.43	1,646.87	225.95	1,643.62	4,935.68
Private doctoral[2]	4,200.42	9,735.17	2,720.69	454.48	6,694.21	9,338.70
Public comprehensive	4,894.27	2,249.09	952.57	214.49	2,161.33	2,097.54
Private comprehensive	2,737.53	3,280.16	834.35	235.66	1,940.85	2,695.42
Private liberal arts	3,418.34	3,479.28	840.61	166.30	424.37	4,039.51
Public 2-year	9,411.19	1,778.00	448.90	93.60	491.52	1,845.19
Other[3]	4,041.73	5,109.03	1,114.32	164.89	1,659.56	4,587.55

[1] All accredited, nonproprietary U.S. postsecondary institutions that grant a 2-year (A.A.) or higher degree and whose accreditation at the higher education level is recognized by the U.S. Department of Education.

[2] Includes institutions classified by the Carnegie Foundation as specialized medical schools.

[3] Public liberal arts, private 2-year, and religious and other specialized institutions, except medical.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey" and 1988 National Survey of Postsecondary Faculty, "Faculty Survey."

Table TA-4.2—Standard errors of mean income for part-time instructional faculty and staff in 4-year institutions, by source of income and program area: Fall 1987 and Fall 1992

			Source of income			
Program area and year	Part-time instructional faculty and staff	Total earned income	Basic salary from institution	Other income from institution	Outside consulting income	Other outside income
1992						
All program areas in 4-year institutions*	10,285.21	2,086.84	774.43	118.84	586.53	1,978.25
Agriculture/home economics	425.00	23,055.62	4,465.95	198.55	22,806.83	5,540.75
Business	1,993.88	8,757.20	921.96	243.33	2,650.92	9,051.00
Education	2,008.72	3,535.44	2,519.29	174.98	317.56	2,424.92
Engineering	1,215.01	17,357.32	3,674.89	763.92	6,131.62	17,609.31
Fine arts	1,930.78	3,367.66	1,470.66	248.36	643.00	2,829.39
Humanities	1,708.80	3,813.48	1,592.89	163.60	620.10	3,254.63
Natural sciences	2,055.67	4,653.35	2,537.06	241.92	588.47	4,118.09
Social sciences	1,934.47	4,471.76	795.44	384.07	583.87	4,469.72
All other fields	2,799.72	3,973.65	1,458.88	511.04	2,092.85	3,212.31
1987						
All program areas in 4-year institutions*	9,569.01	2,242.26	519.05	89.76	991.99	2,201.14
Agriculture/home economics	801.52	9,208.58	4,596.13	61.41	1,191.46	8,733.87
Business	2,623.00	3,517.37	1,080.47	117.65	2,593.38	3,827.85
Education	1,219.19	3,927.93	830.45	116.77	707.84	3,930.70
Engineering	995.26	5,969.96	1,921.15	266.20	4,631.44	6,486.75
Fine arts	2,868.38	2,511.23	781.66	147.36	1,759.70	1,953.74
Humanities	1,831.91	1,640.97	707.05	230.96	305.56	1,662.04
Natural sciences	2,889.61	3,436.59	1,289.75	233.15	720.85	3,875.98
Social sciences	1,912.53	4,859.60	1,560.18	445.84	2,385.98	5,204.69
All other fields	2,572.32	7,556.52	810.77	333.62	1,875.58	7,311.20

* Health sciences faculty are included in the program area total but are not shown separately. See Technical Notes for details.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey" and 1988 National Survey of Postsecondary Faculty, "Faculty Survey."

Table TA-4.3—Standard errors of income for part-time instructional faculty and staff with income beyond basic salary from institution, by source of income and type and control of institution: Fall 1987 and Fall 1992

Type and control of institution and year	Other income from institution: Number[1]	Other income from institution: Percent of total	Other income from institution: Mean	Consulting income: Number[1]	Consulting income: Percent of total	Consulting income: Mean	Other outside income: Number[1]	Other outside income: Percent of total	Other outside income: Mean
1992									
All institutions[2]	3,737.91	0.68	1,033.04	3,607.24	0.66	1,556.66	10,858.75	0.75	1,583.99
Public research	1,350.79	3.98	1,338.13	919.73	2.87	3,203.69	2,671.86	4.42	9,211.74
Private research	1,086.28	3.54	1,982.31	1,381.67	4.27	6,882.88	4,081.18	4.47	10,187.77
Public doctoral[3]	809.57	2.14	902.77	804.15	2.72	2,227.27	2,598.02	2.18	8,461.07
Private doctoral[3]	971.39	3.78	611.58	1,065.82	3.97	10,073.21	2,983.88	4.41	12,431.14
Public comprehensive	993.23	1.71	1,890.16	1,026.04	2.13	6,524.37	3,433.74	1.58	2,053.13
Private comprehensive	814.85	1.85	519.05	1,058.76	1.80	5,573.20	3,555.53	1.81	3,485.38
Private liberal arts	929.65	2.19	259.14	581.85	2.58	1,346.10	2,000.88	2.89	7,131.13
Public 2-year	2,626.21	0.95	559.90	2,398.01	0.82	1,444.17	7,147.30	1.03	1,532.35
Other[4]	731.87	3.15	15,109.67	932.95	3.40	8,053.34	2,632.86	2.88	8,293.73
1987									
All institutions[2]	4,946.44	1.64	304.79	5244.90	1.65	2,450.06	11,320.16	1.43	1,710.33
Public research	835.34	3.67	718.00	1026.50	5.20	1,894.90	2,336.42	4.83	5,099.97
Private research	549.94	5.65	471.07	1094.12	7.58	3,750.94	2,774.45	5.80	13,559.88
Public doctoral[3]	814.10	6.15	795.32	948.60	6.90	5,048.41	1,239.94	6.58	5,378.32
Private doctoral[3]	1,479.55	7.88	1,474.39	2301.55	6.69	17,239.99	3,726.03	5.21	9,950.61
Public comprehensive	1,254.96	2.85	966.03	2508.35	4.49	5,252.58	3,600.31	4.00	2,530.77
Private comprehensive	896.83	3.23	1,142.85	1018.84	3.25	7,212.38	2,371.83	3.73	2,831.25
Private liberal arts	1,277.39	4.85	470.23	1125.69	6.12	1,523.24	2,373.60	3.52	5,860.89
Public 2-year	3,857.99	3.16	534.52	2751.23	2.30	2,596.83	7,861.50	2.33	1,940.50
Other[4]	1,460.23	6.40	545.39	1799.87	7.32	5,189.83	4,029.64	5.72	5,708.52

[1] Includes only those faculty with income from the source.

[2] All accredited, nonproprietary U.S. postsecondary institutions that grant a 2-year (A.A.) or higher degree and whose accreditation at the higher education level is recognized by the U.S. Department of Education.

[3] Includes institutions classified by the Carnegie Foundation as specialized medical schools.

[4] Public liberal arts, private 2-year, and religious and other specialized institutions, except medical.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey" and 1988 National Survey of Postsecondary Faculty, "Faculty Survey."

Table TA-4.4—Standard errors of income for part-time instructional faculty and staff in 4-year institutions with income beyond basic salary from institution, by source of income and program area: Fall 1987 and Fall 1992

Program area and year	Other income from institution			Consulting income			Other outside income		
	Number[1]	Percent of total	Mean	Number[1]	Percent of total	Mean	Number[1]	Percent of total	Mean
1992									
All program areas in 4-year institutions[2]	2,626.36	0.99	531.61	2654.51	1.01	2,448	7809.75	1.11	2,538.88
Agriculture/home economics	116.51	8.46	1,195.13	—	—	—	383.45	12.73	6,084.22
Business	608.74	3.00	1,126.25	706.07	3.63	7,469	1410.90	4.13	12,734.83
Education	635.22	2.82	691.02	852.74	2.93	1,053	1777.97	3.09	2,660.19
Engineering	594.13	7.67	1,315.55	360.51	5.49	27,570	735.33	7.73	27,389.85
Fine arts	850.48	3.06	909.65	733.19	2.78	1,972	1673.71	2.51	3,385.46
Humanities	887.48	2.37	442.60	672.63	2.01	3,512	1347.46	2.26	4,719.95
Natural sciences	562.22	2.40	1,153.26	469.73	2.14	3,260	1518.63	3.80	5,320.19
Social sciences	664.57	2.91	1,897.32	803.96	3.34	2,105	1599.03	2.75	5,558.58
All other fields	637.67	1.82	4,163.49	1216.80	3.03	6,733	2312.69	3.10	3,989.14
1987									
All program areas in 4-year institutions[2]	3,087.81	1.76	359.96	4,463.00	2.19	3,187.00	8,135.79	1.81	2,540.52
Agriculture/home economics	247.24	7.50	175.48	569.81	12.29	1,886.04	761.56	15.99	13,228.34
Business	543.56	3.45	1,157.97	1,813.07	8.65	7,304.38	2,519.21	3.42	4,158.69
Education	927.84	7.57	219.21	904.07	7.13	2,064.10	1,126.32	3.55	4,907.35
Engineering	343.25	6.23	1,758.50	570.15	8.96	11,216.86	789.72	9.11	6,506.20
Fine arts	1,481.13	5.68	479.19	1,220.12	5.04	4,490.76	2,584.56	3.61	2,171.26
Humanities	1,179.47	4.34	470.58	1,056.03	3.82	1,226.29	1,468.59	3.19	2,111.73
Natural sciences	1,385.67	5.30	883.39	1,355.10	5.59	2,484.71	2,600.11	5.28	3,808.31
Social sciences	361.75	3.45	2,729.24	1,423.00	9.76	3,908.14	1,419.94	7.72	6,531.49
All other fields	573.21	3.61	2,108.01	510.59	3.28	10,194.98	2,282.56	3.43	8,416.84

[1] Includes only those faculty with income from the source.

[2] Health sciences faculty are included in the program area total but are not shown separately. See Technical Notes for details.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey" and 1988 National Survey of Postsecondary Faculty, "Faculty Survey."

Table TA-4.5—Standard errors of percentage distribution of part-time instructional faculty and staff, by satisfaction with salary and type and control of institution: Fall 1987 and Fall 1992

Type and control of institution and year	Part-time instructional faculty and staff	Satisfaction with salary	
		Dissatisfied[1]	Satisfied[2]
1992			
All institutions[3]	14,251.60	0.95	0.95
Public research	3,855.94	5.08	5.08
Private research	5,705.40	5.60	5.60
Public doctoral[4]	3,466.44	2.82	2.82
Private doctoral[4]	3,391.30	3.46	3.46
Public comprehensive	4,873.18	2.17	2.17
Private comprehensive	4,211.43	2.23	2.23
Private liberal arts	2,858.25	2.15	2.15
Public 2-year	9,467.70	1.52	1.52
Other[5]	2,979.29	3.37	3.37
1987			
All institutions[3]	13,428.77	1.98	1.98
Public research	2,771.77	6.43	6.43
Private research	2,884.28	9.09	9.09
Public doctoral[4]	1,593.29	7.03	7.03
Private doctoral[4]	4,200.42	11.59	11.59
Public comprehensive	4,894.27	4.71	4.71
Private comprehensive	2,737.53	4.84	4.84
Private liberal arts	3,418.34	4.77	4.77
Public 2-year	9,411.19	3.50	3.50
Other[5]	4,041.73	5.86	5.86

[1] Percentage who said "very dissatisfied" or "somewhat dissatisfied."

[2] Percentage who said "very satisfied" or "somewhat satisfied."

[3] All accredited, nonproprietary U.S. postsecondary institutions that grant a 2-year (A.A.) or higher degree and whose accreditation at the higher education level is recognized by the U.S. Department of Education.

[4] Includes institutions classified by the Carnegie Foundation as specialized medical schools.

[5] Public liberal arts, private 2-year, and religious and other specialized institutions, except medical.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey" and 1988 National Survey of Postsecondary Faculty, "Faculty Survey."

Table TA-4.6—Standard errors of percentage distribution of part-time instructional faculty and staff in 4-year institutions, by satisfaction with salary and program area: Fall 1987 and Fall 1992

Program area and year	Part-time instructional faculty and staff	Satisfaction with salary	
		Dissatisfied[1]	Satisfied[2]
1992			
All program areas in 4-year institutions[3]	10,285.21	1.28	1.28
Agriculture/home economics	425.00	12.29	12.29
Business	1,993.88	3.84	3.84
Education	2,008.72	4.49	4.49
Engineering	1,215.01	6.60	6.60
Fine arts	1,930.78	3.59	3.59
Humanities	1,708.80	2.38	2.38
Natural sciences	2,055.67	3.16	3.16
Social sciences	1,934.47	4.09	4.09
All other fields	2,799.72	2.94	2.94
1987			
All program areas in 4-year institutions[3]	9,569.01	2.34	2.34
Agriculture/home economics	801.52	20.52	20.52
Business	2,623.00	8.90	8.90
Education	1,219.19	6.64	6.64
Engineering	995.26	8.48	8.48
Fine arts	2,868.38	5.54	5.54
Humanities	1,831.91	4.16	4.16
Natural sciences	2,889.61	5.63	5.63
Social sciences	1,912.53	7.98	7.98
All other fields	2,572.32	6.63	6.63

[1] Percentage who said "very dissatisfied" or "somewhat dissatisfied."

[2] Percentage who said "very satisfied" or "somewhat satisfied."

[3] Health sciences faculty are included in the program area total but are not shown separately. See Technical Notes for details.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey" and 1988 National Survey of Postsecondary Faculty, "Faculty Survey."

Table TA-4.7—Standard errors of percentage distribution of part-time instructional faculty and staff, by satisfaction with benefits and type and control of institution: Fall 1987 and Fall 1992

Type and control of institution and year	Part-time instructional faculty and staff	Satisfaction with benefits	
		Dissatisfied[1]	Satisfied[2]
1992			
All institutions[3]	14,251.60	0.97	0.97
Public research	3,855.94	4.59	4.59
Private research	5,705.40	3.23	3.23
Public doctoral[4]	3,466.44	3.40	3.40
Private doctoral[4]	3,391.30	5.24	5.24
Public comprehensive	4,873.18	2.98	2.98
Private comprehensive	4,211.43	2.05	2.05
Private liberal arts	2,858.25	3.19	3.19
Public 2-year	9,467.70	1.32	1.32
Other[5]	2,979.29	3.35	3.35
1987			
All institutions[3]	13,428.77	2.45	2.45
Public research	2,771.77	4.65	4.65
Private research	2,884.28	9.98	9.98
Public doctoral[4]	1,593.29	8.28	8.28
Private doctoral[4]	4,200.42	15.98	15.98
Public comprehensive	4,894.27	5.46	5.46
Private comprehensive	2,737.53	5.14	5.14
Private liberal arts	3,418.34	6.27	6.27
Public 2-year	9,411.19	4.37	4.37
Other[5]	4,041.73	5.57	5.57

[1] Percentage who said "very dissatisfied" or "somewhat dissatisfied."

[2] Percentage who said "very satisfied" or "somewhat satisfied."

[3] All accredited, nonproprietary U.S. postsecondary institutions that grant a 2-year (A.A.) or higher degree and whose accreditation at the higher education level is recognized by the U.S. Department of Education.

[4] Includes institutions classified by the Carnegie Foundation as specialized medical schools.

[5] Public liberal arts, private 2-year, and religious and other specialized institutions, except medical.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey" and 1988 National Survey of Postsecondary Faculty, "Faculty Survey."

Table TA-4.8—Standard errors of percentage distribution of part-time instructional faculty and staff in 4-year institutions, by satisfaction with benefits and program area: Fall 1987 and Fall 1992

Program area and year	Part-time instructional faculty and staff	Satisfaction with benefits	
		Dissatisfied[1]	Satisfied[2]
1992			
All program areas in 4-year institutions[3]	10,285.21	1.44	1.44
Agriculture/home economics	425.00	11.66	11.66
Business	1,993.88	4.30	4.30
Education	2,008.72	3.72	3.72
Engineering	1,215.01	7.45	7.45
Fine arts	1,930.78	3.19	3.19
Humanities	1,708.80	2.36	2.36
Natural sciences	2,055.67	3.84	3.84
Social sciences	1,934.47	3.63	3.63
All other fields	2,799.72	2.97	2.97
1987			
All program areas in 4-year institutions[3]	9,569.01	2.74	2.74
Agriculture/home economics	801.52	14.92	14.92
Business	2,623.00	9.96	9.96
Education	1,219.19	7.74	7.74
Engineering	995.26	12.64	12.64
Fine arts	2,868.38	4.19	4.19
Humanities	1,831.91	4.79	4.79
Natural sciences	2,889.61	6.88	6.88
Social sciences	1,912.53	10.97	10.97
All other fields	2,572.32	6.47	6.47

[1] Percentage who said "very dissatisfied" or "somewhat dissatisfied."

[2] Percentage who said "very satisfied" or "somewhat satisfied."

[3] Health sciences faculty are included in the program area total but are not shown separately. See Technical Notes for details.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey" and 1988 National Survey of Postsecondary Faculty, "Faculty Survey."

APPENDIX D

SURVEY QUESTIONNAIRES

NATIONAL SURVEY OF POSTSECONDARY FACULTY

Faculty Questionnaire

PLEASE NOTE:

Many of our questions ask about your activities during the 1987 Fall Term. By this, we mean whatever academic term was in progress on October 15, 1987.

All questions that ask about your current position or institution refer to your position during the 1987 Fall Term at the institution to which this questionnaire was addressed.

This questionnaire was designed to be completed by both full- and part-time instructional faculty in 2- and 4-year postsecondary institutions of all kinds. Because this is such a diverse group, some of the questions may not be worded quite appropriately for your situation. We would appreciate your tolerance of these difficulties.

1. During the 1987 Fall Term, did you have any instructional duties at this institution (e.g., teaching one or more courses, advising or supervising students' academic activities)?

(PLEASE CIRCLE ONE NUMBER)

Yes 1

No 2

IF NO, PLEASE STOP HERE AND RETURN THIS PACKET TO SRI IN THE ENCLOSED FRANKED ENVELOPE.

2. During the 1987 Fall Term, were at least some of your instructional duties related to for-credit courses, or were all of your instructional duties related to noncredit courses?

(PLEASE CIRCLE ONE NUMBER)

At least some of my instructional duties were related to for-credit courses 1

All of my instructional duties were related to noncredit courses 2

IF ALL NONCREDIT, PLEASE STOP HERE AND RETURN THIS PACKET TO SRI IN THE ENCLOSED FRANKED ENVELOPE.

3. During the 1987 Fall Term, were you on sabbatical from another institution?

Yes 1

No 2

A. NATURE OF EMPLOYMENT

4. During the 1987 Fall Term, did this institution consider you to be employed here full-time or part-time?

Full-time 1

Part-time 2

5. During the 1987 Fall Term, were you employed only at this institution, or did you also have other employment? *Please include outside consulting or other self-owned business.*

Employed only at this institution . . . . . 1 --> SKIP TO Q.7

Also had other employment or consulting . . 2

6. Other than this institution, in which of the following ways were you employed during the 1987 Fall Term?
(PLEASE CIRCLE "FULL-TIME" OR "PART-TIME" FOR ALL SECTORS THAT APPLY)

	TYPE OF EMPLOYMENT	
Employment sector	Full-time (35+ hours/week)	Part-time (<35 hours/week)
Consulting, freelance work, or self-owned business in area directly related to my field at this institution	1	2
Consulting, freelance work, or self-owned business in area largely unrelated to my field at this institution	1	2
On staff of another postsecondary educational institution	1	2
On staff of an elementary or secondary school	1	2
On staff of a hospital or other health care/ clinical setting	1	2
On staff of a foundation or other nonprofit organization	1	2
On staff of a for-profit business or industry in the private sector	1	2
On staff of the federal government (including military)	1	2
On staff of a state or local government	1	2
Other (PLEASE SPECIFY BELOW:) ____________________	1	2

7. Were you chairperson of a department or division at this institution during the 1987 Fall Term?

Yes	1
No	2

8. During the 1987 Fall Term, were you on sabbatical from this institution?

Yes	1
No	2

9. What was your tenure status at this institution during the 1987 Fall Term?

Not applicable: no tenure system at this institution	1	SKIP TO Q.11
Not applicable: no tenure system for my faculty status	2	
Not on tenure track	3	
On tenure track but not tenured	4	
Tenured	5	

10. In what year did you achieve tenure at this institution?
(PLEASE GIVE YOUR BEST ESTIMATE IF NOT SURE)

19_____

PLEASE SKIP TO QUESTION 12

11. During the 1987 Fall Term, what was the duration of your contract or appointment at this institution?

One academic term	1
One academic/calendar year	2
Two or more academic/calendar years	3
Unspecified duration	4
Other (PLEASE SPECIFY BELOW)	5

____

12. Which of the following best describes your academic rank at this institution during the 1987 Fall Term?
(PLEASE CIRCLE ONE NUMBER)

Not applicable: no ranks designated at this institution	0	--> SKIP TO Q.14
Distinguished/Named Professor	1	
Professor	2	
Associate Professor	3	
Assistant Professor	4	
Instructor	5	
Lecturer	6	
Other (PLEASE SPECIFY BELOW)	7	

____

13. In what year did you first achieve this rank?
(PLEASE GIVE YOUR BEST ESTIMATE IF NOT SURE)

19____

14. During the 1987 Fall Term, did you hold any of the following kinds of appointments at this institution?
(PLEASE CIRCLE ALL THAT APPLY)

Acting	1
Affiliate or adjunct	2
Visiting	3
Assigned by religious order	4
No, none of the above	0

15. Have you ever achieved tenure at another institution?
(PLEASE CIRCLE ONE NUMBER AND SPECIFY THE YEAR TENURE FIRST ACHIEVED, IF APPLICABLE)

Yes	1
(YEAR FIRST ACHIEVED: 19____)	
No	2

16. What is your principal field or discipline of teaching?
(PLEASE REFER TO THE LIST OF FIELDS OF STUDY ON PAGES 24-25 AND ENTER THE APPROPRIATE CODE NUMBER(S) BELOW)

Field code of my discipline: ______

17. Are any faculty at this institution legally represented by a union (or other association) for purposes of collective bargaining?

Yes 1
No . . . . 2 } SKIP TO Q.19
Don't know . . . . 9 }

18. Are you a member of the union (or other bargaining association) that represents faculty at this institution?

Yes 1
No 2

B. JOB SATISFACTION ISSUES

19. How satisfied or dissatisfied do *you personally* feel about each of the following aspects of your job at this institution?
(PLEASE CIRCLE ONE NUMBER FOR EACH ITEM)

	DISSATISFIED		SATISFIED		Does not
	Very	Somewhat	Somewhat	Very	apply
My work load	1	2	3	4	0
My job security	1	2	3	4	0
The authority I have to make decisions about what courses I teach	1	2	3	4	0
The authority I have to make decisions about content and methods in the courses I teach	1	2	3	4	0
The authority I have to make decisions about other (noninstructional) aspects of my job	1	2	3	4	0
The mix of teaching, research, administration, and service (as applicable) that I am required to do	1	2	3	4	0

(continued)

Satisfaction with your job at this institution: (continued)

	DISSATISFIED		SATISFIED		Does not apply
	Very	Somewhat	Somewhat	Very	
Opportunity for my advancement in rank at this institution	1	2	3	4	0
Time available for working with students as an advisor, mentor, etc.	1	2	3	4	0
Availability of support services and equipment (including clerical support, personal computers, etc.)	1	2	3	4	0
Freedom to do outside consulting	1	2	3	4	0
My salary	1	2	3	4	0
My benefits, generally	1	2	3	4	0
Overall reputation of the institution	1	2	3	4	0
Institutional mission or philosophy	1	2	3	4	0
Quality of leadership in my department/program	1	2	3	4	0
Quality of chief administrative officers at this campus	1	2	3	4	0
Quality of my colleagues in my department/program	1	2	3	4	0
Quality of faculty leadership (e.g., Academic Senate, Faculty Council) at this institution	1	2	3	4	0
Quality of union leadership at this institution	1	2	3	4	0
Relationship between administration and faculty at this institution	1	2	3	4	0
Interdepartmental cooperation at this institution	1	2	3	4	0
Spirit of cooperation among faculty at this institution	1	2	3	4	0
Quality of my research facilities and support	1	2	3	4	0
Quality of undergraduate students whom I have taught here	1	2	3	4	0

(continued)

Satisfaction with your job at this institution: (continued)

	DISSATISFIED		SATISFIED		Does not apply
	Very	Somewhat	Somewhat	Very	
Quality of graduate students whom I have taught here	1	2	3	4	0
Teaching assistance that I receive	1	2	3	4	0
Research assistance that I receive	1	2	3	4	0
Spouse employment opportunities in this geographic area	1	2	3	4	0
My job here, overall	1	2	3	4	0

20. During the next three years, how likely is it that you will leave this job to do the following?
(PLEASE CIRCLE ONE NUMBER FOR EACH ITEM)

	Not at all likely	Somewhat likely	Very likely
Retire	1	2	3
Seek or accept a (different) part-time job	1	2	3
Seek or accept a (different) full-time job	1	2	3

21. IF you were to leave this job to accept another position, would you want to do more, less, or about the same amount of each of the following as you currently do?
(PLEASE CIRCLE ONE NUMBER FOR EACH ITEM)

	I WOULD WANT TO DO:		
	More of this	Same amount of this as I do now	Less of this
Research	1	2	3
Teaching	1	2	3
Advising students	1	2	3
Service activities	1	2	3
Administration	1	2	3

22. IF you were to leave this job to accept another position, how important would each of the following be in your decision to accept another position?
(PLEASE CIRCLE ONE NUMBER FOR EACH ITEM)

	Not important	Somewhat important	Very important
Salary level	1	2	3
Tenure-track/tenured position	1	2	3
Job security	1	2	3
Opportunities for advancement	1	2	3
Benefits	1	2	3
No pressure to publish	1	2	3
Good research facilities and equipment	1	2	3
Good instructional facilities and equipment	1	2	3
Excellent students	1	2	3
Excellent colleagues	1	2	3
Institutional mission or philosophy that is compatible with my own views	1	2	3
Good job for my spouse	1	2	3
Good geographic location	1	2	3
Good housing	1	2	3
Good environment/schools for my children	1	2	3
A full-time position	1	2	3
A part-time position	1	2	3

23. IF you were to leave your current position, how likely is it that you would do so to:
(PLEASE CIRCLE ONE NUMBER FOR EACH ITEM)

	Not at all likely	Somewhat likely	Very likely
a. Return to school as a student	1	2	3
b. Accept employment in:			
doctoral granting university or college	1	2	3
other 4-year university or college	1	2	3
2-year postsecondary institution	1	2	3
less than 2-year postsecondary institution	1	2	3
elementary or secondary school	1	2	3
hospital or other health care organization	1	2	3
consulting, self-owned business, freelancing	1	2	3
foundation or other nonprofit organization	1	2	3
private sector for-profit business or industry	1	2	3
federal government (including military)	1	2	3
state or local government	1	2	3

24. At what age do you think you are most likely to stop teaching at a postsecondary institution?
(PLEASE CIRCLE ONE NUMBER)

Under 40	1
40 - 44	2
45 - 49	3
50 - 54	4
55 - 59	5
60 - 64	6
65 - 69	7
70 or older	8
Have no idea	9

25. At what age do you think you are most likely to retire from paid employment?
(PLEASE CIRCLE ONE NUMBER)

Under 50 1
50 - 54 2
55 - 59 3
60 - 64 4
65 - 69 5
70 or older . . 6
Have no idea . . 9

C. ACADEMIC/PROFESSIONAL BACKGROUND

26. Please list below each collegiate and graduate degree that you hold, the name and location of the institution from which you received it, the year you received it, and the Field Code (from pages 24-25) that applies. *Please do not list honorary degrees.*
(PLEASE COMPLETE ALL COLUMNS FOR EACH DEGREE)

Codes for type of degree:

1 Certificate, diploma, or degree for completion of undergraduate program of at least 1 year but less than 2 years in length
2 Associate's degree or equivalent
3 Certificate, diploma, or degree for completion of undergraduate program of more than 2 years but less than 4 years in length
4 Bachelor's degree or equivalent
5 Graduate work not resulting in a degree
6 Master's degree or equivalent
7 Doctoral degree (Ph.D., Ed.D., etc.)
8 Professional degree (M.D., D.D.S., L.L.B., etc.)

Degree code	Year received	Field code	Name of institution	City and state/country of institution
_____	19_____	_____	_____	_____
_____	19_____	_____	_____	_____
_____	19_____	_____	_____	_____
_____	19_____	_____	_____	_____
_____	19_____	_____	_____	_____
_____	19_____	_____	_____	_____
_____	19_____	_____	_____	_____

27. **Which of the following undergraduate academic honors or awards, if any, did you receive?**

(PLEASE CIRCLE ALL THAT APPLY)

National academic honor society, such as Phi Beta Kappa, Tau Beta Pi, or other field-specific national honor society	1
Cum laude or honors	2
Magna cum laude or high honors	3
Summa cum laude or highest honors	4
Other undergraduate academic achievement award	5
None of the above	0

28. **When you were in graduate school, which of the following, if any, did you receive?**

(PLEASE CIRCLE ALL THAT APPLY)

Doesn't apply: did not attend graduate school	0
Teaching assistantship	1
Research assistantship	2
Program or residence hall assistantship	3
Fellowship	4
Scholarship or traineeship	5
Grant	6
G.I. Bill or other veterans' financial aid	7
Loan	8
None of the above	9

29. For each of the jobs that you have held since graduating from college, please indicate in the table below the years that you began and left the job, the employment sector, your primary responsibility, and whether you were employed full-or part-time.

- *Please begin with your current job, and work backward.*
- *Do not list promotions in rank at your current job(s) as different jobs.*
- *Do not include temporary positions or work as a graduate assistant.*
- *Please list each job (other than promotions in rank) separately!*

(PLEASE COMPLETE ALL COLUMNS FOR EACH POSITION; SPECIFY EMPLOYMENT SECTOR AND PRIMARY RESPONSIBILITY CODES FROM THE LISTS ON THE FACING PAGE)

	Years job held		Employment sector	Primary responsibility	Full-time	Part-time
	From	To	(ENTER CODE)	(ENTER CODE)	(CIRCLE ONE)	
CURRENT JOB:	19______	present	_______	_______	1	2
	19______	19______	_______	_______	1	2
	19______	19______	_______	_______	1	2
	19______	19______	_______	_______	1	2
	19______	19______	_______	_______	1	2
	19______	19______	_______	_______	1	2
	19______	19______	_______	_______	1	2
	19______	19______	_______	_______	1	2
	19______	19______	_______	_______	1	2
	19______	19______	_______	_______	1	2
	19______	19______	_______	_______	1	2
	19______	19______	_______	_______	1	2
	19______	19______	_______	_______	1	2
	19______	19______	_______	_______	1	2
	19______	19______	_______	_______	1	2

CODES FOR QUESTION 29

	Employment sector codes
01	Graduate-level institution that is not part of a 4-year school (e.g., independent law school)
02	Doctoral granting university or college
03	Other 4-year college or university
04	2-year postsecondary institution
05	Less-than-2-year postsecondary institution
06	Elementary or secondary school
07	Hospital or other health care or clinical setting
08	Consulting, freelance work, or self-owned business in area directly related to my field at this institution
09	Consulting, freelance work, or self-owned business in area largely unrelated to my field at this institution
10	Foundation or other nonprofit organization
11	For-profit business or industry in the private sector
12	Federal government, including military
13	State or local government
14	Other (PLEASE SPECIFY BELOW)

	Primary responsibility codes
1	Teaching
2	Administration
3	Technical or research
4	Community/public service
5	Clinical services
6	Other

IF YOU HAD MORE THAN ONE JOB IN THE "OTHER" CATEGORY, PLEASE LIST SEPARATELY AND CODE EMPLOYMENT SECTORS AS "14a," "14b," ETC., IN Q.30.

(a)____

(b)____

(c)____

(d)____

30. About how many of each of the following have you presented/published/etc. during your entire career and just during the last 2 years? *For publications, please include works that have been accepted for publication.*

(PLEASE GIVE YOUR BEST ESTIMATES IF NOT SURE; IF NONE, CIRCLE "0")

0 No presentations/publications/etc.

	Number in past 2 years	Total during career
Articles or creative works published in refereed professional or trade journals		
Articles or creative works published in nonrefereed professional or trade journals		
Articles or creative works published in juried popular media		
Articles or creative works published in nonjuried popular media or in-house newsletters		
Published reviews of books, articles, or creative works		
Chapters in edited volumes		
Textbooks		
Other books		
Monographs		
Research or technical reports disseminated internally or to clients		
Presentations at conferences, workshops, etc.		
Exhibitions or performances in the fine or applied arts		
Patents or copyrights (excluding thesis or dissertation)		
Computer software products		

D. INSTITUTIONAL RESPONSIBILITIES AND WORKLOAD

31. During the 1987 Fall Term, how many graduate or undergraduate dissertations or theses, comprehensive exams, or orals committees did you chair or serve on at this institution? *(PLEASE ENTER A NUMBER IN EACH CATEGORY; IF NONE, ENTER "0")*

	Number served on but did not chair	Number chaired
Thesis or dissertation committees		
Comprehensive exams or orals committees (other than as part of thesis/dissertation committees)		

32. For each for-credit class or section that you taught at this institution during the 1987 Fall Term, please indicate below the number of hours per week that the class met; if the class was team taught, please indicate the average number of hours per week that you personally taught it. Next, please indicate the number and primary level of students enrolled; the class' primary setting; and the number of teaching assistants (TA's), readers, etc., who assisted you with the class.

Please do not include noncredit courses that you taught. Also, please do not include individualized instruction, such as independent study or individual (one-on-one) performance classes.

If you taught multiple sections of the same course, please count them as separate classes, but do not include the lab section of a course as a separate class.

Codes for primary level of students:

1 Lower division students (first or second year) in program leading to associate or bachelor's degree

2 Upper division students (juniors or seniors) in program leading to bachelor's degree

3 Graduate students (post-baccalaureate)

4 Students in program leading to certificate or award other than associate, bachelor's, or graduate degree

5 All other students

6 Any combination of the above

Codes for primary setting:

1 Lecture

2 Seminar, discussion group

3 Lab, clinic

4 Fieldwork, field trips

5 Role playing, simulation, or other performance (e.g., art, music, drama)

6 TV, radio, or other distance media

7 Any combination of the above

8 Other (PLEASE SPECIFY BELOW):

(a)______________________________

(b)______________________________

(c)______________________________

Number of hours per week the class met	IF TEAM TAUGHT: Avg. # hours per week you taught the class	Number of students enrolled	Primary level of students (ENTER CODE)	Primary setting (ENTER CODE)	Number of TA's readers, etc.

33. For each type of student listed below, please indicate how many at this institution received individualized instruction from you during the 1987 Fall Term. Also indicate the total number of contact hours per week that you spent providing individualized instruction to each group.
(PLEASE GIVE YOUR BEST ESTIMATES IF NOT SURE; IF NONE, CIRCLE "0")

Provided no individualized instruction 0

	INDIVIDUALIZED INSTRUCTION	
Types of students at this institution	Number of students	Total contact hours per week
Lower division students (first or second year) in program leading to associate or bachelor's degree	______	______
Upper division students (juniors, seniors) in program leading to bachelor's degree	______	______
Graduate students (post-baccalaureate)	______	______
Students in program leading to certificate/award other than associate/bachelor's/graduate degree	______	______
All other students	______	______

34. During the 1987 Fall Term, were you a principal investigator or project director on any grants or contracts at this institution, including service contracts or internal awards?

Yes 1

No . . . . . 2 —> SKIP TO Q.36

35. For the grants and contracts for which you were a principal investigator (PI) during the 1987 Fall Term, please indicate below, by source, how many you had and their total dollar amount for the 1987-88 academic year.
If you were/are a principal investigator on a multiple-investigator project, please divide the total dollar amount by the number of PIs on the project.
(PLEASE GIVE YOUR BEST ESTIMATE FOR EACH SOURCE; IF NONE, ENTER "0")

Source of funding	Number of grants/contracts	Total funding for the 1987-88 academic year
Federal government	______	$______
State or local government	______	$______
Foundation or other nonprofit	______	$______
For-profit business or industry in the private sector	______	$______
This institution	______	$______
Other source (PLEASE SPECIFY)		
______________	______	$______

36. On the average, how many hours per week did you spend at each of the following kinds of work during the 1987 Fall Term?
(PLEASE GIVE YOUR BEST ESTIMATES IF NOT SURE)

	Average number hours per week during the 1987 Fall Term
All activities at this institution (teaching, research, administration, etc.)	________
Any other paid activities (e.g,. consulting, working on other jobs)	________
Unpaid (*pro bono*) professional service activities	________

37. Please estimate the percentage of your total working hours (i.e., the categories listed in Question 36) that you spent on each of the following activities during the 1987 Fall Term. *(PLEASE GIVE YOUR BEST ESTIMATES IF NOT SURE; IF NONE, ENTER "0")*

Note: The percentages you provide should sum to 100% of the total time you spent on professional activities.

	Percent
Working with student organizations or intramural athletics	________
Teaching, advising, or supervising students (other than those activities covered in the above category)	________
Grading papers, preparing courses, developing new curricula, etc.	________
Administrative activities (including paperwork; staff supervision; serving on in-house committees, such as the academic senate; etc.)	________
Research; scholarship; preparing or reviewing articles or books; attending or preparing for professional meetings or conferences; etc.	________
Giving performances or exhibitions in the fine or applied arts, or speeches	________
Seeking outside funding (including proposal writing)	________
Taking courses, pursuing an advanced degree	________
Other professional development activities, such as practice or other activities to remain current in your field	________
Providing legal or medical services or psychological counseling to clients or patients	________
Outside consulting or freelance work, working at self-owned business	________
Paid or unpaid community or public service (civic, religious, etc.)	________
Other (PLEASE SPECIFY:) ________________________________	________
____	________

We know that this is tedious, but please be sure that the above adds to 100%

E . BENEFITS AND PROFESSIONAL DEVELOPMENT ACTIVITIES

38. During the 1987 Fall Term, were the following employee benefits available to you at this institution?
(PLEASE CIRCLE ONE NUMBER FOR EACH BENEFIT)

	AVAILABLE TO ME		
	Yes	No	Don't know
Free or subsidized wellness or health promotion program (e.g., fitness or smoking cessation program)	1	2	9
Paid maternity leave	1	2	9
Paid paternity leave	1	2	9
Subsidized medical insurançe or medical care	1	2	9
Subsidized dental insurance or dental care	1	2	9
Subsidized disability insurance	1	2	9
Subsidized life insurance	1	2	9
Retirement plan to which institution makes contributions	1	2	9
Retirement plan to which you make contributions but the institution does not	1	2	9
Tuition remission/grants at this or other institutions for spouse	1	2	9
Tuition remission/grants at this or other institutions for children	1	2	9
Subsidized child care	1	2	9
Subsidized housing/mortgage	1	2	9

39. Listed below are some ways that institutions and departments may use internal funds for the professional development of faculty members.

- If a professional development activity was not available to you during the 1987 Fall Term, please circle the "Not Available" code
- If an activity was available to you at this institution during the 1987 Fall Term, please indicate how adequate to your needs the funds available for that purpose were.
- If you do not know whether an activity was available to you, please circle the "Don't Know" code.

(PLEASE CIRCLE ONE NUMBER FOR EACH ITEM)

		AVAILABLE TO ME:				
		INADEQUATE		ADEQUATE		
Institutional or departmental funding for:	NOT available to me	Very	Somewhat	Somewhat	Very	Don't know if this was available
Tuition remission at this or other institutions	0	1	2	3	4	9
Professional association memberships	0	1	2	3	4	9
Registration fees, etc., for workshops, conferences, etc.	0	1	2	3	4	9
Professional travel	0	1	2	3	4	9
Training to improve research skills	0	1	2	3	4	9
Training to improve teaching skills	0	1	2	3	4	9
Retraining for fields in higher demand	0	1	2	3	4	9
Computer equipment	0	1	2	3	4	9

G. COMPENSATION

Note: Your responses on these and all other items in this questionnaire are STRICTLY CONFIDENTIAL, will be used only in statistical summaries, and will not be disclosed to your institution or to any individual or group. Furthermore, all information that would permit identification of individuals or institutions will be suppressed from the survey files.

40. For the calendar year 1987, please estimate your gross earnings before taxes from each of the sources listed below.

Please do not record any earnings in more than one category.

(PLEASE GIVE YOUR BEST ESTIMATES IF NOT SURE; IF NONE, ENTER "0")

Income from this institution:

Basic salary $

Other teaching at this institution not included in basic salary (e.g., for summer session)

Supplements not included in basic salary (for administration, research, coaching sports, etc.)

Non-monetary compensation (e.g., food, housing, car) *(Please give approximate value)*

Any other income from this institution

Income from other sources:

Employment at another academic institution

Legal or medical services or psychological counseling

Outside consulting, consulting business, or freelance work

Self-owned business (other than consulting)

Professional performances or exhibitions

Speaking fees, honoraria

Royalties or commissions

Any other employment

Non-monetary compensation (e.g., food, housing, car) *(Please give approximate value)*

Other sources of earned income (PLEASE SPECIFY:)

G. SOCIODEMOGRAPHIC CHARACTERISTICS

41. Your gender:

Male 1
Female 2

42. In what year were you born? 19______

43. Are you of Hispanic descent--for example, Mexican, Mexican-American, Chicano, Cuban, Puerto Rican, etc.?

Yes 1
No 2

44. What is your race? *(PLEASE CIRCLE ONE NUMBER)*

American Indian, Aleut, Eskimo . . . 1
Asian or Pacific Islander (Japanese, Chinese, Filipino, Asian Indian, Korean, Vietnamese, Hawaiian, Guamanian, Samoan, other Asian) . . 2
Black 3
White 4
Other (PLEASE SPECIFY BELOW) 5

____

45. What is your current marital status? *(PLEASE CIRCLE ONE NUMBER)*

Single, never married 1
Married 2
Separated 3
Divorced 4
Widowed 5

46. Of what country are you currently a citizen?

USA 1
Other (PLEASE SPECIFY BELOW) . . 2

____

47. What is the highest level of formal education completed by your mother, your father, and your spouse? *(PLEASE CIRCLE ONE NUMBER FOR EACH PERSON)*

	Mother	Father	Spouse
Don't know/not applicable	0	0	0
Less than high school	1	1	1
High school diploma	2	2	2
Some college	3	3	3
Associate degree	4	4	4
Bachelor's degree	5	5	5
Master's degree	6	6	6
Doctorate or professional degree (e.g., PhD, MD, DVM, JD/LLB)	7	7	7
Other (PLEASE SPECIFY BELOW)	8	8	8

____

H. ACADEMIC INTERESTS AND VALUES

48. Please indicate the extent to which you agree or disagree with each of the following statements. *(PLEASE CIRCLE ONE NUMBER FOR EACH STATEMENT)*

	DISAGREE		AGREE	
	Strongly	Somewhat	Somewhat	Strongly
General issues:				
It is important for faculty to participate in governing their institutions.	1	2	3	4
Faculty promotions should be based at least in part on formal evaluations by students.	1	2	3	4
The tenure system in higher education should be preserved.	1	2	3	4
Teaching effectiveness should be the primary criterion for promotion of college faculty.	1	2	3	4
Research/publications should be the primary criterion for promotion of college faculty.	1	2	3	4
Faculty should be free to present in class any idea they consider relevant.	1	2	3	4
Collective bargaining is likely to bring overall higher salaries and improved benefits for faculty.	1	2	3	4

(continued)

	DISAGREE		AGREE		
	Strongly	Somewhat	Somewhat	Strongly	Does not apply
Private consulting in areas directly related to a faculty member's field of research or teaching should be restricted.	1	2	3	4	
It is important to encourage students to consider a career in higher education.	1	2	3	4	
Institutional Issues:					
The administrative function is taking an increasingly heavy share of available resources at this institution.	1	2	3	4	
At this institution, research is rewarded more than teaching.	1	2	3	4	0
Female faculty members are treated fairly at this institution.	1	2	3	4	0
Faculty who are members of racial or ethnic minorities are treated fairly at this institution.	1	2	3	4	0

49. Please indicate *your opinion* regarding whether each of the following has worsened, improved, or stayed the same in recent years.
(PLEASE CIRCLE ONE NUMBER FOR EACH ITEM)

	Worsened	Stayed the same	Improved	Have no idea
The quality of undergraduate students in higher education	1	2	3	9
The quality of graduate students in my field	1	2	3	9
The quality of students who choose to pursue academic careers in my field	1	2	3	9
The opportunities junior faculty have for advancement in my field	1	2	3	9
The professional competence of individuals entering my academic field	1	2	3	9
Respect for the academic profession, generally	1	2	3	9

THANK YOU VERY MUCH FOR YOUR PARTICIPATION

Please return this completed questionnaire in the enclosed franked envelope to:
National Survey of Postsecondary Faculty
SRI International, P.O. Box 2124, Menlo Park, CA 94025-2124

CODES FOR MAJOR FIELDS OF STUDY AND ACADEMIC DISCIPLINES

AGRICULTURE

001	Agribusiness & Agricultural Production
002	Agricultural, Animal, Food, & Plant Sciences
003	Renewable Natural Resources, including Conservation, Fishing, & Forestry
004	Other Agriculture

ARCHITECTURE & ENVIRONMENTAL DESIGN

005	Architecture & Environmental Design
006	City, Community, & Regional Planning
007	Interior Design
008	Land Use Management and Reclamation
009	Other Arch. & Environmental Design

ART

010	Art History and Appreciation
011	Crafts
012	Dance
013	Design (other than Arch. or Interior)
014	Dramatic Arts
015	Film Arts
016	Fine Arts
017	Music
018	Music History and Appreciation
019	Other Visual & Performing Arts

BUSINESS

020	Accounting
021	Banking & Finance
022	Business Administration & Management
023	Business Administrative Support (e.g., Bookkeeping, Office Management, Secretarial)
024	Human Resources Development
025	Organizational Behavior
026	Marketing & Distribution
027	Other Business

COMMUNICATIONS

028	Advertising
029	Broadcasting and Journalism
030	Communications Research
031	Communication Technologies
032	Other Communications

COMPUTER SCIENCE

033	Computer & Information Sciences
034	Computer Programming
035	Data Processing
036	Systems Analysis
037	Other Computer Science

EDUCATION

038	Education, General
039	Basic Skills
040	Bilingual/Cross-cultural education
041	Curriculum & Instruction
042	Education Administration
043	Education Evaluation and Research
044	Educational Psychology
045	Special Education
046	Student Counseling & Personnel Svcs.
047	Other Education

Teacher Education

048	Pre-Elementary
049	Elementary
050	Secondary
051	Adult & Continuing
052	Other General Teacher Ed. Programs
053	Teacher Education in Specific Subjects

ENGINEERING

054	Engineering, General
055	Civil Engineering
056	Electrical, Electronics, & Communication Engineering
057	Mechanical Engineering
058	Other Engineering
059	Engineering-Related Technologies

ENGLISH AND LITERATURE

060	English, General
061	Composition and Creative Writing
062	American Literature
063	English Literature
064	Linguistics
065	Speech, Debate, & Forensics
066	English as a Second Language
067	English, Other

FOREIGN LANGUAGES

068	Chinese (Mandarin, Cantonese, or Other Chinese)
069	French
070	German
071	Italian
072	Latin
073	Japanese
074	Other Asian
075	Russian or Other Slavic
076	Spanish
077	Other Foreign Languages

CODES FOR MAJOR FIELDS OF STUDY AND ACADEMIC DISCIPLINES (continued)

	HEALTH SCIENCES
078	Allied Health Technologies & Services
079	Dentistry
080	Health Services Administration
081	Medicine, including Psychiatry
082	Nursing
083	Pharmacy
084	Public Health
085	Veterinary Medicine
086	Other Health Sciences
087	HOME ECONOMICS
088	INDUSTRIAL ARTS
089	LAW
090	LIBRARY & ARCHIVAL SCIENCES
	NATURAL SCIENCES
091	Life or Physical Sciences, General
092	Astronomy
093	Biology
094	Botany
095	Chemistry
096	Geological Sciences
097	Physics
098	Physiology
099	Zoology
100	Other Natural Sciences
101	MATHEMATICS & STATISTICS
102	MILITARY STUDIES
103	MULTI/INTERDISCIPLINARY STUDIES
104	PARKS & RECREATION
105	PHILOSOPHY, RELIGION, & THEOLOGY
106	PSYCHOLOGY
107	PROTECTIVE SERVICES (e.g., Criminal Justice, Fire Protection)
108	PUBLIC AFFAIRS (e.g., Community Services, Public Administration, Public Works, Social Work)
109	SCIENCE TECHNOLOGIES
	SOCIAL SCIENCES
110	Social Sciences, General
111	Anthropology
112	Archeology
113	Area & Ethnic Studies
114	Demography
115	Economics
116	Geography
117	History
118	International Relations
119	Political Science & Government
120	Sociology
121	Other Social Sciences
	VOCATIONAL TRAINING
	Construction Trades
122	Carpentry
123	Electrician
124	Plumbing
125	Other Construction Trades
	Consumer, Personal, & Misc. Services
126	Personal Services (e.g., Barbering, Cosmetology)
127	Other Consumer Services
	Mechanics and Repairers
128	Electrical & Electronics Equipment Repair
129	Heating, Air Conditioning, & Refrigeration Mechanics & Repairers
130	Vehicle & Mobile Equipment Mechanics & Repairers
131	Other Mechanics and Repairers
	Precision Production
132	Drafting
133	Graphic & Print Communications
134	Leatherworking and Upholstering
135	Precision Metal Work
136	Woodworking
137	Other Precision Production Work
	Transportation and Material Moving
138	Air Transportation (e.g., Piloting, Traffic Control, Flight Attendance, Aviation Management)
139	Land Vehicle & Equipment Operation
140	Water Transportation (e.g., Boat and Fishing Operations, Deep Water Diving, Marina Operations, Sailors and Deckhands)
141	Other Transportation and Material Moving
999	OTHER

OMB No. 1850-0608
Expiration Date: 12/93

U.S. Department of Education
Office of Educational Research and Improvement

National Center for Education Statistics

1993 NATIONAL STUDY OF POSTSECONDARY FACULTY

FACULTY
QUESTIONNAIRE

All information on this form will be kept confidential and will not be disclosed or released to your institution or any other group or individual.

Co-sponsored by: **National Science Foundation**
National Endowment for the Humanities

Contractor: **National Opinion Research Center (NORC)**
University of Chicago
Mailing Address:
1525 East 55th Street
Chicago, Illinois 60615
Toll-Free Number: 1-800-733-NORC

NATIONAL STUDY OF POSTSECONDARY FACULTY

Instructions for Completing Faculty Questionnaire

Many of our questions ask about your activities during the 1992 Fall Term. By this, we mean whatever academic term was in progress on October 15, 1992.

All questions that ask about your position at "this institution" refer to your position during the 1992 Fall Term ***at the institution listed on the label on the back cover of the questionnaire.***

This questionnaire was designed to be completed by both full-time and part-time instructional faculty and staff, and non-instructional faculty, in 2- and 4-year (and above) higher education institutions of all types and sizes. Please read each question carefully and follow all instructions. Some of the questions may not appear to fit your situation precisely; if you have a response other than those listed for a particular question, write in that response.

Most questions ask you to circle a number to indicate your response. Circle the number in front of your response and not the response itself. Other questions ask you to fill in information; write in the information in the space provided.

Mailing instructions for returning the completed questionnaire are on page 26.

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NATIONAL STUDY OF POSTSECONDARY FACULTY:
Faculty Questionnaire

1. During the 1992 Fall Term, did you have any instructional duties at this institution (e.g., teaching one or more courses, or advising or supervising students' academic activities)? *(CIRCLE ONE NUMBER)*

1. Yes **(ANSWER 1A)** 2. No **(SKIP TO QUESTION 2)**

1A. During the 1992 Fall Term, were . . . *(CIRCLE ONE NUMBER)*

1. *all* of your instructional duties related to credit courses,

2. some of your instructional duties related to credit courses or advising or supervising academic activities for credit, or

3. *all* of your instructional duties related to *non*credit courses or advising or supervising *non*credit academic activities?

2. What was your principal activity at this institution during the 1992 Fall Term? If you have equal responsibilities, please select one. *(CIRCLE ONE NUMBER)*

1. Teaching

2. Research

3. Technical activities (e.g., programmer, technician, chemist, engineer, etc.)

4. Clinical service

5. Community/public service

6. Administration
   (WRITE IN TITLE OR POSITION) ______________________________

7. On sabbatical from this institution

8. Other (subsidized performer, artist-in-residence, etc.)

3. During the 1992 Fall Term, did you have faculty status at this institution? *(CIRCLE ONE NUMBER)*

1. Yes

2. No, I did not have faculty status

3. No, no one has faculty status at this institution

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SECTION A. NATURE OF EMPLOYMENT

4. During the 1992 Fall Term, did this institution consider you to be employed part-time or full-time? *(CIRCLE ONE NUMBER)*

1. Part-time **(ANSWER 4A)**
2. Full-time **(SKIP TO QUESTION 5)**

4A. Did you hold a part-time position at this institution during the 1992 Fall Term because . . . *(CIRCLE "1" OR "2" FOR EACH REASON)*

Yes	No	
1	2	a. you preferred working on a part-time basis?
1	2	b. a full-time position was not available?
1	2	c. you were supplementing your income from other employment?
1	2	d. you wanted to be part of an academic environment?
1	2	e. you were finishing a graduate degree?
1	2	f. of other reasons?

5. Were you chairperson of a department or division at this institution during the 1992 Fall Term? *(CIRCLE ONE NUMBER)*

1. Yes
2. No

6. In what year did you begin the job you held at this institution during the 1992 Fall Term? Include promotions in rank as part of your Fall 1992 job. *(WRITE IN YEAR)*

19☐☐

7. What was your tenure status at this institution during the 1992 Fall Term? *(CIRCLE ONE NUMBER)*

1. Tenured → **7A. In what year did you achieve tenure at this institution?** 19☐☐ **(SKIP TO QUESTION 9)**
2. On tenure track but not tenured
3. Not on tenure track
4. No tenure system for my faculty status
5. No tenure system at this institution

8. During the 1992 Fall Term, what was the duration of your contract or appointment at this institution? *(CIRCLE ONE NUMBER)*

1. One academic term
2. One academic/calendar year
3. A limited number of years (i.e., two or more academic/calendar years)
4. Unspecified duration
5. Other

9. Which of the following best describes your academic rank, title, or position at this institution during the 1992 Fall Term? *(CIRCLE ONE NUMBER, OR "NA")*

NA. Not applicable: no ranks designated at this institution **(SKIP TO QUESTION 11)**

1. Professor
2. Associate Professor
3. Assistant Professor
4. Instructor
5. Lecturer
6. Other *(WRITE IN)*____

10. In what year did you first achieve this rank?
(WRITE IN YEAR)

19 ☐☐

11. During the 1992 Fall Term, which of the following kinds of appointments did you hold at this institution?
(CIRCLE ALL THAT APPLY)

1. Acting
2. Affiliate or adjunct
3. Visiting
4. Assigned by religious order
5. Clinical
   (WRITE IN TITLE OR POSITION) ____
6. Research
   (WRITE IN TITLE OR POSITION) ____
7. None of the above

12. **What is your principal field or discipline of teaching?** *(REFER TO THE LIST OF MAJOR FIELDS OF STUDY ON PAGES 5 AND 6 AND ENTER THE APPROPRIATE CODE NUMBER AND NAME BELOW. IF YOU HAVE NO FIELD OF TEACHING, CIRCLE "NA")*

NA. Not Applicable

CODE FOR FIELD
OR DISCIPLINE: ____________ ______________________________
NAME OF PRINCIPAL FIELD/DISCIPLINE

13. **What is your principal area of research? If equal areas, select one.** *(IF YOU HAVE NO RESEARCH AREA, CIRCLE "NA")*

NA. Not Applicable

CODE FOR FIELD
OR DISCIPLINE: ____________ ______________________________
NAME OF PRINCIPAL FIELD/DISCIPLINE

CODES FOR MAJOR FIELDS OF STUDY AND ACADEMIC DISCIPLINES

	AGRICULTURE
101	Agribusiness & Agricultural Production
102	Agricultural, Animal, Food, & Plant Sciences
103	Renewable Natural Resources, including Conservation, Fishing, & Forestry
110	Other Agriculture
	ARCHITECTURE & ENVIRONMENTAL DESIGN
121	Architecture & Environmental Design
122	City, Community, & Regional Planning
123	Interior Design
124	Land Use Management & Reclamation
130	Other Arch. & Environmental Design
	ART
141	Art History & Appreciation
142	Crafts
143	Dance
144	Design (other than Arch. or Interior)
145	Dramatic Arts
146	Film Arts
147	Fine Arts
148	Music
149	Music History & Appreciation
150	Other Visual & Performing Arts
	BUSINESS
161	Accounting
162	Banking & Finance
163	Business Administration & Management
164	Business Administrative Support (e.g., Bookkeeping, Office Management, Secretarial)
165	Human Resources Development
166	Organizational Behavior
167	Marketing & Distribution
170	Other Business
	COMMUNICATIONS
181	Advertising
182	Broadcasting & Journalism
183	Communications Research
184	Communication Technologies
190	Other Communications
	COMPUTER SCIENCE
201	Computer & Information Sciences
202	Computer Programming
203	Data Processing
204	Systems Analysis
210	Other Computer Science
	EDUCATION
221	Education, General
222	Basic Skills
223	Bilingual/Cross-cultural Education
224	Curriculum & Instruction
225	Education Administration
226	Education Evaluation & Research
227	Educational Psychology
228	Special Education
229	Student Counseling & Personnel Svcs.
230	Other Education
	TEACHER EDUCATION
241	Pre-Elementary
242	Elementary
243	Secondary
244	Adult & Continuing
245	Other General Teacher Ed. Programs
250	Teacher Education in Specific Subjects
	ENGINEERING
261	Engineering, General
262	Civil Engineering
263	Electrical, Electronics, & Communication Engineering
264	Mechanical Engineering
265	Chemical Engineering
270	Other Engineering
280	Engineering-Related Technologies
	ENGLISH AND LITERATURE
291	English, General
292	Composition & Creative Writing
293	American Literature
294	English Literature
295	Linguistics
296	Speech, Debate, & Forensics
297	English as a Second Language
300	English, Other

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	FOREIGN LANGUAGES
311	Chinese (Mandarin, Cantonese, or Other Chinese)
312	French
313	German
314	Italian
315	Latin
316	Japanese
317	Other Asian
318	Russian or Other Slavic
319	Spanish
320	Other Foreign Languages
	HEALTH SCIENCES
331	Allied Health Technologies & Services
332	Dentistry
333	Health Services Administration
334	Medicine, including Psychiatry
335	Nursing
336	Pharmacy
337	Public Health
338	Veterinary Medicine
340	Other Health Sciences
350	HOME ECONOMICS
360	INDUSTRIAL ARTS
370	LAW
380	LIBRARY & ARCHIVAL SCIENCES
	NATURAL SCIENCES: BIOLOGICAL SCIENCES
391	Biochemistry
392	Biology
393	Botany
394	Genetics
395	Immunology
396	Microbiology
397	Physiology
398	Zoology
400	Biological Sciences, Other
	NATURAL SCIENCES: PHYSICAL SCIENCES
411	Astronomy
412	Chemistry
413	Physics
414	Earth, Atmosphere, and Oceanographic (Geological Sciences)
420	Physical Sciences, Other
430	MATHEMATICS
440	STATISTICS
450	MILITARY STUDIES
460	MULTI/INTERDISCIPLINARY STUDIES
470	PARKS & RECREATION
480	PHILOSOPHY AND RELIGION
490	THEOLOGY
500	PROTECTIVE SERVICES (e.g., Criminal Justice, Fire Protection)
510	PSYCHOLOGY
520	PUBLIC AFFAIRS (e.g., Community Services, Public Administration, Public Works, Social Work)
530	SCIENCE TECHNOLOGIES
	SOCIAL SCIENCES AND HISTORY
541	Social Sciences, General
542	Anthropology
543	Archeology
544	Area & Ethnic Studies
545	Demography
546	Economics
547	Geography
548	History
549	International Relations
550	Political Science & Government
551	Sociology
560	Other Social Sciences
	VOCATIONAL TRAINING
	CONSTRUCTION TRADES
601	Carpentry
602	Electrician
603	Plumbing
610	Other Construction Trades
	CONSUMER, PERSONAL, & MISC. SERVICES
621	Personal Services (e.g., Barbering, Cosmetology)
630	Other Consumer Services
	MECHANICS AND REPAIRERS
641	Electrical & Electronics Equipment Repair
642	Heating, Air Conditioning, & Refrigeration Mechanics & Repairers
643	Vehicle & Mobile Equipment Mechanics & Repairers
644	Other Mechanics & Repairers
	PRECISION PRODUCTION
661	Drafting
662	Graphic & Print Communications
663	Leatherworking & Upholstering
664	Precision Metal Work
665	Woodworking
670	Other Precision Production Work
	TRANSPORTATION AND MATERIAL MOVING
681	Air Transportation (e.g., Piloting, Traffic Control, Flight Attendance, Aviation Management)
682	Land Vehicle & Equipment Operation
683	Water Transportation (e.g., Boat & Fishing Operations, Deep Water Diving, Marina Operations, Sailors & Deckhands)
690	Other Transportation & Material Moving
900	**OTHER** ***(IF YOU USE THIS CODE, BE SURE TO WRITE IN A COMPLETE DESCRIPTION AT QUESTIONS 12-13, AND 16)***

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SECTION B. ACADEMIC/PROFESSIONAL BACKGROUND

14. Which of the following undergraduate academic honors or awards, if any, did you receive? *(CIRCLE ALL THAT APPLY)*

1. National academic honor society, such as Phi Beta Kappa, Tau Beta Pi, or other field-specific national honor society
2. Cum laude or honors
3. Magna cum laude or high honors
4. Summa cum laude or highest honors
5. Other undergraduate academic achievement award
6. None of the above

15. When you were in graduate school, which of the following forms of financial assistance, if any, did you receive? *(CIRCLE ALL THAT APPLY, OR CIRCLE "NA")*

NA. Not applicable; did not attend graduate school **(GO TO QUESTION 16)**

1. Teaching assistantship
2. Research assistantship
3. Program or residence hall assistantship
4. Fellowship
5. Scholarship or traineeship
6. Grant
7. G.I. Bill or other veterans' financial aid
8. Federal or state loan
9. Other loan
10. None of the above

16. **Please list below the degrees or other formal awards that you hold, the year you received each one, the field code (from pages 5-6) that applies, name of the field, and the name and location of the institution from which you received each degree or award. Do not list honorary degrees.** *(COMPLETE ALL COLUMNS FOR EACH DEGREE)*

CODES FOR TYPE OF DEGREE

1 Professional degree (M.D., D.D.S., L.L.B., etc.)
2 Doctoral degree (Ph.D., Ed.D., etc.)
3 Master's degree or equivalent
4 Bachelor's degree or equivalent
5 Certificate, diploma, or degree for completion of undergraduate program of more than 2 years but less than 4 years in length
6 Associate's degree or equivalent
7 Certificate, diploma, or degree for completion of undergraduate program of at least 1 year but less than

	A. Degree Code (see above)	B. Year Received	C. Field Code (from pp. 5-6)	D. Name of Field (from pp. 5-6)	E. Name of Institution (a) and City and State/Country of Institution (b)
(1) Highest	_____	19_____	_______	____________________ ____________________	a. ____________________ ____________________ b. ____________________ ____________________
(2) Next Highest	_____	19_____	_______	____________________ ____________________	a. ____________________ ____________________ b. ____________________ ____________________
(3) Next Highest	_____	19_____	_______	____________________ ____________________	a. ____________________ ____________________ b. ____________________ ____________________
(4) Next Highest	_____	19_____	_______	____________________ ____________________	a. ____________________ ____________________ b. ____________________ ____________________

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17. During the 1992 Fall Term, were you employed only at this institution, or did you also have other employment including any outside consulting or other self-owned business, or private practice? *(CIRCLE ONE NUMBER)*

1. Employed only at this institution **(SKIP TO QUESTION 19)**
2. Had other employment, consulting, self-owned business, or private practice

17A. How many different jobs, other than your employment at this institution, did you have during the 1992 Fall Term? Include all outside consulting, self-owned business, and private practice. *(WRITE IN NUMBER)*

_____________ Number of Jobs

18. Not counting any employment at this institution, what was the employment sector of the main other job you held during Fall 1992? *(CIRCLE ONE NUMBER)*

1. 4-year college or university, graduate or professional school
2. 2-year or other postsecondary institution
3. Elementary or secondary school
4. Consulting, freelance work, self-owned business, or private practice
5. Hospital or other health care or clinical setting
6. Foundation or other nonprofit organization other than health care organization
7. For-profit business or industry in the private sector
8. Federal government, including military, or state or local government
9. Other *(WRITE IN)* ____

18A. What year did you begin that job? *(WRITE IN YEAR)*

19 ☐☐

18B. What was your primary responsibility in that job? *(CIRCLE ONE NUMBER)*

1. Teaching
2. Research
3. Technical activities (e.g., programmer, technician, chemist, engineer, etc.)
4. Clinical service
5. Community/public service
6. Administration
7. Other

18C. Was that job full-time or part-time? *(CIRCLE ONE NUMBER)*

1. Full-time
2. Part-time

19. **The next questions ask about jobs that ended before the beginning of the 1992 Fall Term. For the three most recent and significant main jobs that you held during the past 15 years, indicate below the year you began and the year**

you left each job, the employment sector, your primary responsibility, and whether you were employed full-time or part-time.

- **Do not list promotions in rank at one place of employment as different jobs.**
- **Do not include temporary positions (i.e., summer positions) or work as a graduate student.**
- **List each job (other than promotion in rank) separately.**

If not applicable, circle "NA" ⟶	**NA**	**NA**	**NA**
	A.	**B.**	**C.**
(1) YEARS JOB HELD	**MOST RECENT MAIN JOB (PRIOR TO FALL 1992)**	**NEXT MOST RECENT MAIN JOB**	**NEXT MOST RECENT MAIN JOB**
FROM:	19______	19______	19______
TO:	19______	19______	19______
(2) EMPLOYMENT SECTOR	*(CIRCLE ONE)*	*(CIRCLE ONE)*	*(CIRCLE ONE)*
4-year college or university, graduate or professional school	1	1	1
2-year or other postsecondary institution	2	2	2
Elementary or secondary school	3	3	3
Consulting, freelance work, self-owned business, or private practice	4	4	4
Hospital or other health care or clinical setting	5	5	5
Foundation or other nonprofit organization other than health care organization	6	6	6
For-profit business or industry in the private sector	7	7	7
Federal government, including military, or state or local government	8	8	8
Other	9	9	9
(3) PRIMARY RESPONSIBILITY	*(CIRCLE ONE)*	*(CIRCLE ONE)*	*(CIRCLE ONE)*
Teaching	1	1	1
Research	2	2	2
Technical activities (e.g., programmer, technician, chemist, engineer, etc.)	3	3	3
Clinical service	4	4	4
Community/public service	5	5	5
Administration	6	6	6
Other	7	7	7
(4) FULL-TIME/PART-TIME	*(CIRCLE ONE)*	*(CIRCLE ONE)*	*(CIRCLE ONE)*
Full-time	1	1	1
Part-time	2	2	2

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20. About how many of each of the following have you presented/published/etc. during your entire career and during the last 2 years? For publications, please include only works that have been accepted for publication. Count multiple presentations/publications of the same work only once. *(CIRCLE "NA" IF YOU HAVE NOT PUBLISHED OR PRESENTED)*

NA. No presentations/publications/etc. **(GO TO QUESTION 21)**

(WRITE IN A NUMBER ON EACH LINE; IF NONE, WRITE IN "0")

	Type of Presentation/Publication/etc.	**A. Total during career**	**B. Number in past 2 years**
(1)	Articles published in refereed professional or trade journals	________	________
(2)	Articles published in nonrefereed professional or trade journals	________	________
(3)	Creative works published in juried media	________	________
(4)	Creative works published in nonjuried media or in-house newsletters	________	________
(5)	Published reviews of books, articles, or creative works	________	________
(6)	Chapters in edited volumes	________	________
(7)	Textbooks	________	________
(8)	Other books	________	________
(9)	Monographs	________	________
(10)	Research or technical reports disseminated internally or to clients	________	________
(11)	Presentations at conferences, workshops, etc.	________	________
(12)	Exhibitions or performances in the fine or applied arts	________	________
(13)	Patents or copyrights (excluding thesis or dissertation)	________	________
(14)	Computer software products	________	________

SECTION C. INSTITUTIONAL RESPONSIBILITIES AND WORKLOAD

21. During the 1992 Fall Term, how many undergraduate or graduate thesis or dissertation committees, comprehensive exams, orals committees, or examination or certification committees did you chair and/or serve on at this institution? *(CIRCLE "NA" IF YOU DID NOT SERVE ON ANY COMMITTEES)*

NA. Did not serve on any undergraduate or graduate committees **(GO TO QUESTION 22)**

(WRITE IN A NUMBER ON EACH LINE; IF NONE, WRITE IN "0")

Type of Committee	**A.** **Number served on**	**B.** **Of that number, how many did you chair?**
(1) Undergraduate thesis or dissertation committees	______	______
(2) Undergraduate comprehensive exams or orals committees (other than as part of thesis/dissertation committees)	______	______
(3) Undergraduate examination/certification committees	______	______
(4) Graduate thesis or dissertation committees	______	______
(5) Graduate comprehensive exams or orals committees (other than as part of thesis/dissertation committees)	______	______
(6) Graduate examination/certification committees	______	______

22. During the 1992 Fall Term, what was the total number of classes or sections you taught at this institution? Do not include individualized instruction, such as independent study or individual performance classes. Count multiple sections of the same course as a separate class, but not the lab section of a course.
(WRITE IN A NUMBER, OR CIRCLE "0")

0. No classes taught **(SKIP TO QUESTION 25)**

______ Number of classes/sections **(ANSWER 22A)**

22A. How many of those classes were classes for credit?

0. No classes for credit **(SKIP TO QUESTION 25)**

______ Number of classes/sections for credit **(ANSWER QUESTION 23 ON THE NEXT PAGE)**

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23. **For each class or section that you taught for credit at this institution during the 1992 Fall Term, please answer the following items. Do not include individualized instruction, such as independent study or individual one-on-one performance classes.**

If you taught multiple sections of the same course, count them as separate classes, but do not include the lab section of the course as a separate class. For each class, enter the code for the academic discipline of the class. (Refer to pages 5-6 for the codes. Please enter the code rather than the course name.)

	A.	B.
	FIRST FOR-CREDIT CLASS	**SECOND FOR-CREDIT CLASS**
(1) CODE FOR ACADEMIC DISCIPLINE OF CLASS (from pp. 5-6)	☐	☐
(2) DURING 1992 FALL TERM		
Number of weeks the class met?	a. ________	a. ________
Number of credit hours?	b. ________	b. ________
Number of hours the class met per week?	c. ________	c. ________
Number of teaching assistants, readers?	d. ________	d. ________
Number of students enrolled?	e. ________	e. ________
Was this class team taught?	f. 1. Yes 2. No	f. 1. Yes 2. No
Average # hours per week *you* taught the class?	g. ________	g. ________
(3) PRIMARY LEVEL OF STUDENTS	*(CIRCLE ONE)*	*(CIRCLE ONE)*
Lower division students (first or second year postsecondary) or	1	1
Upper division students (third or fourth year postsecondary) or	2	2
Graduate or any other post-baccalaureate students, or	3	3
All other students?	4	4
(4) PRIMARY INSTRUCTIONAL METHOD USED	*(CIRCLE ONE)*	*(CIRCLE ONE)*
Lecture	1	1
Seminar	2	2
Discussion group or class presentations	3	3
Lab, clinic or problem session	4	4
Apprenticeship, internship, field work, or field trips	5	5
Role playing, simulation, or other performance (e.g., art, music, drama)	6	6
TV or radio	7	7
Group projects	8	8
Cooperative learning groups	9	9

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C.	D.	E.	
THIRD FOR-CREDIT CLASS	**FOURTH FOR-CREDIT CLASS**	**FIFTH FOR-CREDIT CLASS**	
☐	☐	☐	
a. ______	a. ______	a. ______	**a. Number of weeks the class met**
b. ______	b. ______	b. ______	**b. Number of credit hours**
c. ______	c. ______	c. ______	**c. Number of hours the class met per week**
d. ______	d. ______	d. ______	**d. Number of teaching assistants, readers**
e. ______	e. ______	e. ______	**e. Number of students enrolled**
f. 1. Yes 2. No	f. 1. Yes 2. No	f. 1. Yes 2. No	**f. Was this class team taught**
g. ______	g. ______	g. ______	**g. Average # hours per week *you* taught**
(CIRCLE ONE)	*(CIRCLE ONE)*	*(CIRCLE ONE)*	
1	1	1	**Lower division students**
2	2	2	**Upper division students**
3	3	3	**Graduate, post-baccalaureate students**
4	4	4	**All other students**
(CIRCLE ONE)	*(CIRCLE ONE)*	*(CIRCLE ONE)*	
1	1	1	**Lecture**
2	2	2	**Seminar**
3	3	3	**Discussion group or class presentations**
4	4	4	**Lab, clinic or problem session**
5	5	5	**Apprenticeship, internship, etc.**
6	6	6	**Role playing, simulation, performance, etc.**
7	7	7	**TV or radio**
8	8	8	**Group projects**
9	9	9	**Cooperative learning groups**

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24. Did you teach any undergraduate courses for credit during the 1992 Fall Term at this institution?

1. Yes **(ANSWER 24A)** 2. No **(SKIP TO QUESTION 25)**

24A. In how many of the undergraduate courses that you taught for credit during the 1992 Fall Term did you use . . . *(CIRCLE ONE NUMBER FOR EACH ITEM)*

None	Some	All	
1	2	3	a. Computational tools or software?
1	2	3	b. Computer-aided or machine-aided instruction?
1	2	3	c. Student presentations?
1	2	3	d. Student evaluations of each other's work?
1	2	3	e. Multiple-choice midterm and/or final exam?
1	2	3	f. Essay midterm and/or final exams?
1	2	3	g. Short-answer midterm and/or final exams?
1	2	3	h. Term/research papers?
1	2	3	i. Multiple drafts of written work?
1	2	3	j. Grading on a curve?
1	2	3	k. Competency-based grading?

25. For each type of student listed below, please indicate how many students received individual instruction from you during the 1992 Fall Term, (e.g., independent study or one-on-one instruction, including working with individual students in a clinical or research setting), and the total number of contact hours with these students per week.
Do not count regularly scheduled office hours. *(WRITE IN A NUMBER ON EACH LINE; IF NONE, WRITE IN "0")*

Type of students receiving Formal Individualized Instruction	A. Number of students	B. Total contact hours per week
(1) Lower division students (first or second year postsecondary)	_______	_______
(2) Upper division students (third or fourth year postsecondary)	_______	_______
(3) Graduate or any other post-baccalaureate students	_______	_______
(4) All other students	_______	_______

26. During the 1992 Fall Term, how many regularly scheduled office hours did you have per week?
(WRITE IN A NUMBER; IF NONE, WRITE IN "0")

__________ Number of hours per week

27. During the 1992 Fall Term, how much informal contact with students did you have each week outside of the classroom? Do not count individual instruction, independent study, etc., or regularly scheduled office hours.
(WRITE IN A NUMBER; IF NONE, WRITE IN "0")

__________ Number of hours per week

28. During the 1992 Fall Term, were you engaged in any professional research, writing, or creative works?
1. Yes **(ANSWER QUESTION 29)** 2. No **(SKIP TO QUESTION 34)**

29. **How would you describe your primary professional research, writing, or creative work during the 1992 Fall Term?** *(CIRCLE ONE NUMBER)*

1. Pure or basic research
2. Applied research
3. Policy-oriented research or analysis
4. Literary or expressive
5. Program/Curriculum design and development
6. Other

30. **During the 1992 Fall Term, were you engaged in any funded research or funded creative endeavors? Include any grants, contracts, or institutional awards. Do not include consulting services.** *(CIRCLE ONE NUMBER)*

1. Yes
2. No **(SKIP TO QUESTION 34)**

31. **During the 1992 Fall Term, were you a principal investigator (PI) or co-principal investigator (Co-PI) for any grants or contracts?** *(CIRCLE ONE NUMBER)*

1. Yes
2. No **(SKIP TO QUESTION 33)**

32. **During the 1992 Fall Term, how many individuals other than yourself were supported by all the grants and contracts for which you were PI or Co-PI?** *(WRITE IN NUMBER; IF NONE, WRITE IN "0")*

_______ Number of individuals

33. **Fill out the information below for each funding source during the 1992 Fall Term. If not sure, give your best estimate.**

A. **Funding source** *(CIRCLE "1" OR "2" FOR EACH SOURCE)*		**B.** **Number of Grants/ Contracts**	**C.** **Work done as...** *(CIRCLE ALL THAT APPLY)*	**D.** **Total funds for 1992-93 academic year**	**E.** **How funds were used** *(CIRCLE ALL THAT APPLY)*
(1) This institution?	1. Yes → 2. No	______	1. PI 2. Co-PI 3. Staff	$ __________	1. Research 2. Program/curriculum development 3. Other
(2) Foundation or other nonprofit organization?	1. Yes → 2. No	______	1. PI 2. Co-PI 3. Staff	$ __________	1. Research 2. Program/curriculum development 3. Other
(3) For profit business or industry in the private sector?	1. Yes → 2. No	______	1. PI 2. Co-PI 3. Staff	$ __________	1. Research 2. Program/curriculum development 3. Other
(4) State or local government?	1. Yes → 2. No	______	1. PI 2. Co-PI 3. Staff	$ __________	1. Research 2. Program/curriculum development 3. Other
(5) Federal Government?	1. Yes → 2. No	______	1. PI 2. Co-PI 3. Staff	$ __________	1. Research 2. Program/curriculum development 3. Other
(6) Other source? *(WRITE IN)* ______________	1. Yes → 2. No	______	1. PI 2. Co-PI 3. Staff	$ __________	1. Research 2. Program/curriculum development 3. Other

34. How would you rate each of the following facilities or resources at this institution that were available for your own use during the 1992 Fall Term? *(CIRCLE ONE NUMBER, OR "NA," ON EACH LINE)*

Not Available/ Not Applicable	Very Poor	Poor	Good	Very Good	
NA	1	2	3	4	a. Basic research equipment/instruments
NA	1	2	3	4	b. Laboratory space and supplies
NA	1	2	3	4	c. Availability of research assistants
NA	1	2	3	4	d. Personal computers
MA	1	2	3	4	e. Centralized (main frame) computer facilities
NA	1	2	3	4	f. Computer networks with other institutions
NA	1	2	3	4	g. Audio-visual equipment
NA	1	2	3	4	h. Classroom space
NA	1	2	3	4	i. Office space
NA	1	2	3	4	j. Studio/performance space
NA	1	2	3	4	k. Secretarial support
NA	1	2	3	4	l. Library holdings

35. Listed below are some ways that institutions and departments may use internal funds for the professional development of faculty.

A. Was institutional or department funding available for your use during the past two years for . . .		**B.** Did you use any of those funds at this institution?	**C.** Were those funds adequate for your purposes?
(1) tuition remission at this or other institutions?	1. Yes ⟶ 2. No DK. Don't know	1. Yes ⟶ 2. No	1. Yes 2. No
(2) professional association memberships and/or registration fees?	1. Yes ⟶ 2. No DK. Don't know	1. Yes ⟶ 2. No	1. Yes 2. No
(3) professional travel?	1. Yes ⟶ 2. No DK. Don't know	1. Yes ⟶ 2. No	1. Yes 2. No
(4) training to improve research or teaching skills?	1. Yes ⟶ 2. No DK. Don't know	1. Yes ⟶ 2. No	1. Yes 2. No
(5) retraining for fields in higher demand?	1. Yes ⟶ 2. No DK. Don't know	1. Yes ⟶ 2. No	1. Yes 2. No
(6) sabbatical leave?	1. Yes ⟶ 2. No DK. Don't know	1. Yes ⟶ 2. No	1. Yes 2. No

36. **On the average, how many hours per week did you spend at each of the following kinds of activities during the 1992 Fall Term?** *(IF NOT SURE, GIVE YOUR BEST ESTIMATES)*

Average number hours per week
during the 1992 Fall Term

________________ a. All paid activities at this institution (teaching, research, administration, etc.)

________________ b. All unpaid activities at this institution

________________ c. Any other paid activities outside this institution (e.g., consulting, working on other jobs)

________________ d. Unpaid (pro bono) professional service activities outside this institution

37. **In column A, we ask you to allocate your total work time in the Fall of 1992 (as reported in Question 36) into several categories. We realize that they are not mutually exclusive categories (e.g., research may include teaching; preparing a course may be part of professional growth). We ask, however, that you allocate as best you can the proportion of your time spent in activities whose primary focus falls within the indicated categories. In column B, indicate what percentage of your time you would prefer to spend in each of the listed categories.**

A. **% of Work Time Spent**	*(WRITE IN A PERCENTAGE ON EACH LINE.* *IF NOT SURE, GIVE YOUR BEST ESTIMATE; IF NONE, WRITE IN "0")*	**B.** **% of Work Time Preferred**
______%	a. **Teaching** (including teaching, grading papers, preparing courses; developing new curricula; advising or supervising students; working with student organizations or intramural athletics)	______%
______%	b. **Research/Scholarship** (including research; reviewing or preparing articles or books; attending or preparing for professional meetings or conferences; reviewing proposals; seeking outside funding; giving performances or exhibitions in the fine or applied arts, or giving speeches)	______%
______%	c. **Professional Growth** (including taking courses, pursuing an advanced degree; other professional development activities, such as practice or activities to remain current in your field)	______%
______%	d. **Administration**	______%
______%	e. **Outside Consulting or Freelance Work**	______%
______%	f. **Service/Other Non-Teaching Activities** (including providing legal or medical services or psychological counseling to clients or patients; paid or unpaid community or public service, service to professional societies/associations; other activities or work not listed in a-e)	______%
100%	PLEASE BE SURE THAT THE PERCENTAGES YOU PROVIDE ADD UP TO 100% OF THE TOTAL TIME.	100%

38. **Are you a member of the union (or other bargaining association) that represents faculty at this institution?**

1. Union is available, but I am not eligible
2. I am eligible, but not a member
3. I am eligible, and a member
4. Union is not available at this institution

SECTION D. JOB SATISFACTION ISSUES

39. **How satisfied or dissatisfied are you with each of the following aspects of your instructional duties at this institution?** *(CIRCLE "NA" IF YOU HAD NO INSTRUCTIONAL DUTIES)*

NA. No instructional duties **(GO TO QUESTION 40)**

(CIRCLE ONE NUMBER FOR EACH ITEM; IF AN ITEM DOES NOT APPLY TO YOU, WRITE IN "NA" NEXT TO THE ITEM)

Very Dissatisfied	Somewhat Dissatisfied	Somewhat Satisfied	Very Satisfied	
1	2	3	4	a. The authority I have to make decisions about content and methods in the courses I teach
1	2	3	4	b. The authority I have to make decisions about other (non-instructional) aspects of my job
1	2	3	4	c. The authority I have to make decisions about what courses I teach
1	2	3	4	d. Time available for working with students as an advisor, mentor, etc.
1	2	3	4	e. Quality of undergraduate students whom I have taught here
1	2	3	4	f. Quality of graduate students whom I have taught here

40. **How satisfied or dissatisfied are you with the following aspects of your job at this institution?** *(CIRCLE ONE NUMBER FOR EACH ITEM)*

Very Dissatisfied	Somewhat Dissatisfied	Somewhat Satisfied	Very Satisfied	
1	2	3	4	a. My work load
1	2	3	4	b. My job security
1	2	3	4	c. Opportunity for advancement in rank at this institution
1	2	3	4	d. Time available for keeping current in my field
1	2	3	4	e. Freedom to do outside consulting
1	2	3	4	f. My salary
1	2	3	4	g. My benefits, generally
1	2	3	4	h. Spouse or partner employment opportunities in this geographic area
1	2	3	4	i. My job here, overall

41. **During the next three years, how likely is it that you will leave this job to . . .**
(CIRCLE ONE NUMBER FOR EACH ITEM)

Not At All Likely	Somewhat Likely	Very Likely		
1	2	3	a.	accept a part-time job at a different postsecondary institution?
1	2	3	b.	accept a full-time job at a different postsecondary institution?
1	2	3	c.	accept a part-time job not at a postsecondary institution?
1	2	3	d.	accept a full-time job not at a postsecondary institution?
1	2	3	e.	retire from the labor force?

42. **At what age do you think you are most likely to stop working at a postsecondary institution?**
(WRITE IN AGE, OR CIRCLE "DK")

__________ Years of age

DK. Don't know

43. **If you were to leave your current position in academia to accept another position inside or outside of academia, how important would each of the following be in your decision?** *(CIRCLE ONE NUMBER FOR EACH ITEM)*

Not Important	Somewhat Important	Very Important		
1	2	3	a.	Salary level
1	2	3	b.	Tenure-track/tenured position
1	2	3	c.	Job security
1	2	3	d.	Opportunities for advancement
1	2	3	e.	Benefits
1	2	3	f.	No pressure to publish
1	2	3	g.	Good research facilities and equipment
1	2	3	h.	Good instructional facilities and equipment
1	2	3	i.	Good job or job opportunities for my spouse or partner
1	2	3	j.	Good geographic location
1	2	3	k.	Good environment/schools for my children
1	2	3	l.	Greater opportunity to teach
1	2	3	m.	Greater opportunity to do research
1	2	3	n.	Greater opportunity for administrative responsibilities

44. If you could elect to draw on your retirement and still continue working at your institution on a part-time basis, would you do so? *(CIRCLE ONE)*

1. Yes
2. No
DK. Don't know

45. If an early retirement option were offered to you at your institution, would you take it? *(CIRCLE ONE)*

1. Yes
2. No
DK. Don't know

46. At which age do you think you are most likely to retire from all paid employment? *(WRITE IN AGE, OR CIRCLE "DK")*

__________ Years of age

DK. Don't know

SECTION E. COMPENSATION

***Note:** Your responses to these items as with all other items in this questionnaire are voluntary and strictly confidential. They will be used only in statistical summaries, and will not be disclosed to your institution or to any individual or group. Furthermore, all information that would permit identification of individuals or institutions will be removed from the survey files.*

47. For the calendar year 1992, estimate your gross compensation before taxes from each of the sources listed below.

(IF NOT SURE, GIVE YOUR BEST ESTIMATES; IF NO COMPENSATION FROM A SOURCE, WRITE IN "0")

Compensation from this institution:

$ __________ a. Basic salary → b. **Type of appointment (e.g., 9 months)** ☐ # of months

$ __________ c. Other teaching at this institution not included in basic salary (e.g., for summer session)

$ __________ d. Supplements not included in basic salary (for administration, research, coaching sports, etc.)

$ __________ e. Non-monetary compensation, such as food, housing, car (Do not include employee benefits such as medical, dental, or life insurance)

$ __________ f. Any other income from this institution

Compensation from other sources:

$ __________ g. Employment at another academic institution

$ __________ h. Legal or medical services or psychological counseling

$ __________ i. Outside consulting, consulting business or freelance work

$ __________ j. Self-owned business (other than consulting)

$ __________ k. Professional performances or exhibitions

$ __________ l. Speaking fees, honoraria

$ __________ m. Royalties or commissions

$ __________ n. Any other employment

$ __________ o. Non-monetary compensation, such as food, housing, car (Do not include employee benefits such as medical, dental, or life insurance)

Other sources of earned income *(WRITE IN BELOW):*

$ __________ p. ______________________________

$ __________ q. ______________________________

48. For the calendar year 1992, how many persons were in your household including yourself?

________ Total number in household

49. For the calendar year 1992, what was your total household income?

$ __________ Total household income

50. For the calendar year 1992, how many dependents did you have? Do not include yourself. (A dependent is someone receiving at least half of his or her support from you.)

________ Number of dependents

SECTION F. SOCIODEMOGRAPHIC CHARACTERISTICS

51. Are you . . .

1. male, or
2. female?

52. In what month and year were you born?
(WRITE IN MONTH AND YEAR)

☐☐ 19☐☐
MONTH YEAR

53. What is your race? *(CIRCLE ONE NUMBER)*

1. American Indian or Alaskan Native
2. Asian or Pacific Islander **(ANSWER 53A)**
3. African American/Black
4. White
5. Other *(WRITE IN BELOW)*

____

→ **53A. What is your Asian or Pacific Islander origin? If more than one, circle the one you consider the most important part of your background.** *(CIRCLE ONE NUMBER)*

1. Chinese
2. Filipino
3. Japanese
4. Korean
5. Southeast Asian (Vietnamese, Laotian, Cambodian/Kampuchean, etc.)
6. Pacific Islander
7. Other *(WRITE IN BELOW)*

____

(SKIP TO QUESTION 55)

54. Are you of Hispanic descent?
(CIRCLE ONE NUMBER)

1. Yes **(ANSWER 54A)**
2. No **(SKIP TO QUESTION 55)**

→ 54A. **What is your Spanish/Hispanic origin? If more than one, circle the one you consider the most important part of your background.**

1. Mexican, Mexican-American, Chicano
2. Cuban, Cubano
3. Puerto Rican, Puertorriqueno, or Bouricuan
4. Other *(WRITE IN BELOW)*

____

55. What is your current marital status?
(CIRCLE ONE NUMBER)

1. Single, never married
2. Married
3. Living with someone in a marriage-like relationship
4. Separated
5. Divorced
6. Widowed

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56. **In what country were you born?**
(CIRCLE ONE NUMBER)

1. USA
2. Other *(WRITE IN)*____

57. **What is your citizenship status?**
(CIRCLE ONE NUMBER)

1. United States citizen, native

2. United States citizen, naturalized

3. Permanent resident of the United States (immigrant visa)

   ____
   COUNTRY OF PRESENT CITIZENSHIP

4. Temporary resident of United States (non-immigrant visa)

   ____
   COUNTRY OF PRESENT CITIZENSHIP

58. **What is the highest level of formal education completed by your mother and your father?**
(CIRCLE ONE FOR EACH PERSON)

A. **Mother**	**B.** **Father**		
1	1	a.	Less than high school diploma
2	2	b.	High school diploma
3	3	c.	Some college
4	4	d.	Associate's degree
5	5	e.	Bachelor's degree
6	6	f.	Master's degree
7	7	g.	Doctorate or professional degree (e.g., Ph.D., M.D., D.V.M., J.D./L.L.B.)
8	8	h.	Other
DK	DK	i.	Don't know

59. **Please indicate the extent to which you agree or disagree with each of the following statements.** *(CIRCLE ONE NUMBER FOR EACH STATEMENT)*

Disagree Strongly	Disagree Somewhat	Agree Somewhat	Agree Strongly	
1	2	3	4	a. Teaching effectiveness should be the primary criterion for promotion of college teachers at this institution.
1	2	3	4	b. Research/publications should be the primary criterion for promotion of college teachers at this institution.
1	2	3	4	c. At this institution, research is rewarded more than teaching.
1	2	3	4	d. State or federally mandated assessment requirements will improve the quality of undergraduate education.
1	2	3	4	e. Female faculty members are treated fairly at this institution.
1	2	3	4	f. Faculty who are members of racial or ethnic minorities are treated fairly at this institution.
1	2	3	4	g. If I had it to do over again, I would still choose an academic career.

60. **Please indicate your opinion regarding whether each of the following has worsened, stayed the same, or improved in recent years at this institution.** *(CIRCLE ONE FOR EACH ITEM)*

Worsened	Stayed the Same	Improved	Don't Know	
1	2	3	DK	a. The quality of students who choose to pursue academic careers in my field
1	2	3	DK	b. The opportunities junior faculty have for advancement in my field
1	2	3	DK	c. The professional competence of individuals entering my academic field
1	2	3	DK	d. The ability of this institution to meet the educational needs of entering students
1	2	3	DK	e. The ability of faculty to obtain external funding
1	2	3	DK	f. Pressure to increase faculty workload at this institution
1	2	3	DK	g. The quality of undergraduate education at this institution
1	2	3	DK	h. The atmosphere for free expression of ideas
1	2	3	DK	i. The quality of research at this institution

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